

THE CONNECTICUT SCHOOL JOURNAL.

NEW SERIES.

NEW HAVEN, CONN., JANUARY, 1873.

VOL. III, NO. 1.

ST. PAUL'S SCHOOL.—No. I.

BY MISS A. B. BERARD, WEST POINT, N. Y.

"John Collett, the sonne of Henrye Collett, Dean of Paules, desiring nothyng more thanne education and bringing up of children in good manners and literature, in the yere of our Lord One Thousand fyve hundredth and twelfe, bylded a Schole in the Estende of Paules Church Yode, to be taught in the same *Children of all Nations and Contres indifferently*, to the number of One hundred and Fifty-three."

This was the origin of the first purely *Free School* that was founded in England, and surely no Foundation has reason to look back with greater or juster pride to either the motives or character of its founder. "Other Public Schools," says Stanton, "may boast of Royal or Ecclesiastical settlement, of aristocratic patronage, or of wealthy endowments; but St Paul's must always retain the proud distinction of having been founded at the very revival of learning, out of a pure spirit of love for the truth which Academies are the appropriate means of disseminating."

Dr. John Colet, Dean of St. Pauls, was born in London in the year 1466. He was the eldest of twenty-two children all of whom he survived, and thus became sole heir of his father, Sir Henry Colet, a wealthy citizen, and twice Lord Mayor of London. The mother of this large family is cited by Erasmus as a beautiful example of christian resignation. In a letter of condolence and exhortation to a friend upon the death of a child, he writes: "I knew in England the mother of John Colet, a matron of singular piety; she had by the same husband eleven sons and as many daughters, all of which hopeful brood was snatched away from her, except her eldest son; and she lost her husband far advanced in years; she herself being come up to her 90th year, looking so smooth, and was so cheerful, that you would think she had never shed a tear nor brought a child into the world; and if I mistake not, she survived her son, Dean Colet.

Now that which supplies a women with so much fortitude was not learning, but piety towards God."

John Colet received his early education at St. Anthony's School, as did also his distinguished contemporary, Sir Thomas Moore. St. Anthony's, Threadneedle street, was an ancient seminary of great reputation in the city, and Stow, the old chronicler of London, says that, "it commonly presented the best scholars and had the prize in those days." In 1483, twelve months before "The Boy Bachelor," Wolsey, took his degree at Magdalen, Colet removed to Oxford and entered the same college. Notwithstanding his strictly ecclesiastical training, he was, from the first, a Reformer of that class known as the Humanists, of which Erasmus was a conspicuous leader: they were those who strove to liberalize men's views in every direction whether of art, science, literature, or religion, but would have avoided, if possible, any great disruption in the existing order whether of Church or College.

Having taken his degree in Arts, and acquired, according to his biographer, "a most admirable competence in learning at home," Colet sought still further to increase his knowledge by travel. On the Continent he made the acquaintance of the great Erasmus, and between them a friendship was formed which contributed throughout their lives to the improvement and happiness of both. In Italy our young traveler met with those who fostered in him the taste, already acquired at Oxford, for the "New Learning," (heretical, it was esteemed by some), as the study of Greek was called. Here he met his learned countrymen Linacre and Grocyne, and above all, William Lily, the most accomplished Greek Scholar of his age.

Lily, two years younger than Colet, had after leaving College gone on a pilgrimage to Jerusalem, and subsequently visited Rhodes, which had been ever since the fall of Constantinople, in the previous century, a veritable Patmos for exiled Greek Learning. There he remained five years, acquiring a familiarity with the antiquities, arts, letters and social life of Greece, which rendered him justly the

L10
+C721
v.3

arbitrator of his age on all questions pertaining to classical literature.

Colet was not only imbued with learning but possessed of many graces and accomplishments, a comely person, and pleasing deportment. These together with the wealth and high connections of his family gave him every prospect of success in the career of a courtier. But turning from all such allurements the young graduate, immediately after taking his degree at Oxford, entered the Church. He rose from one ecclesiastical preferment to another until finally, in 1505, he became Dean of St. Paul's, London. His endeavors to reform the lax discipline of the Cathedral, his bold denunciation of the corruptions which prevailed in religion, and especially his practice of reading and teaching publicly from the Scriptures, involved him in an accusation of heresy, preferred against him by the Bishop of London. By what means Colet escaped the flames, so easily kindled in those days for whoever was suspected of heresy, we are not told, further than that Latimer in one of his sermons avers that "had not God turned the King's heart to the Dean he would certainly have been burned." From being the martyr, he was happily preserved to be the patron of learning, and his troubles and persecutions are said to have had no other influence upon his disposition than that of rendering him more devout and charitable."

The good Dean's work of benevolence expanded in proportion to the enlargement of his means and opportunities, and with every new preferment in the Church, he employed the revenues that accrued in fresh enterprises for the advancement of learning or religion. When in the year 1509 he was left, with the exception of his mother, the sole survivor of his numerous family, he determined to devote the greater part of the large fortune which was now his inheritance, to the erection and endowment of a Grammar School in London, and in as close proximity as possible to the Cathedral Church. Although himself an ecclesiastic and Dean of St. Pauls, he entrusted the guardianship of his Foundation not to the Chapter of the Cathedral, as would have seemed most natural, especially in that age, but to a great civic guide or company, that of the Mercers of London. Erasmus reports as from Colet himself the reason of this singularly wise selection. He says, "After he had finished all, he left the perpetual care and oversight of the estate, and government of it, not to the Clergy, not to the Bishop, not to the Chapter, nor to any great Minister at Court,

but amongst the married layman, to the Company of Mercers, men of probity and reputation. And when he was asked the reason of so committing the trust, he answered to this effect:—"That there was no absolute certainty in human affairs; but for his own part, he found less corruption in such a body of citizens than in any other order or degree of mankind."

VOCAL GYMNASTICS, WITH REFERENCE TO THE SOUNDS OF FOREIGN LANGUAGES.

BY MORTON W. EASTON, HARTFORD.

There are few parts of the present developing system of instruction more difficult to adjust than the course in the Modern Languages, and especially in the lower schools. The time of children at school is already so fully, and as it seems to many, so well employed, that the addition of any branch, even for a single term, cannot be made without hesitation, while if a useful degree of proficiency in a modern language is to be attained, it must be pursued through a series of years, requiring the displacement, in part at least, of branches now considered indispensable. The reason commonly urged, and with much force, in favor of such a change, such as the great value of an acquaintance with modern tongues as an instrument of general culture, and as a means to assist in further investigation, does not seem to have any peculiar application to the schools of lower grade, or to render necessary the transformation of these. Good translations and judiciously selected annotations may keep pace with even the rapid march of German investigation, and provide the student with all that he is likely really to need during his whole school and college life.

But there is one important aspect of the question that is not commonly considered, the necessity of acquiring foreign sounds during the period of childhood, it being well known that, after this time, they are to be acquired not at all, or only with extreme difficulty and much pains taking.

This is the simple fact. Why it is that children differ in this respect from adults, and how indeed even children manage to reproduce the sounds they hear without comprehending the complicated mechanism of their production, are profound mysteries, like all other instances of the acquirement of muscular co ordination, but the fact is well established from experience with languages of every character and through the whole range of sounds. And this is the case whatever the relation of the parent

language of the learner to the language learned, proving that he is not assisted by any supposable inherited special capability. As the person grows older, the ability is in great part lost ;—"the organs of utterance lose their flexibility," as we phrase it, and the diligent student, who has enthusiastically devoted all his energies to the profound study of a modern tongue, finds himself nevertheless incapable of attaining to even a fair degree of perfection in its oral use, and that not from any fault of will, but because he is no longer able to fully control the association of the muscles of the throat.

Since this is the case, it would seem as if these studies should be introduced into the lower schools at once, in order to avoid the loss of this precious period in the life of the child.

But there are many difficulties in the way of such a speedy transformation of the curriculum. Even where school committees are agreed as to the propriety of the step, the districts, for various reasons, may refuse to concur, and with the most favorable view of the future we must expect a very long period of time to elapse before such a radical alteration will be universally or even generally made. The question arises then, whether it is not possible to devise some means of availing ourselves of this period of "flexibility," thus giving the present generation of school children the lasting possession of these sounds, without the necessity of establishing a full course of linguistic instruction. If this is possible, then the child may, in after life, undertake the study of a modern tongue with the certainty of being able to attain to a degree of success that shall be proportioned to his earnestness and efforts. From this, the present graduate of most of even the better class of American colleges is forever debarred. No amount of study of the history, vocabulary and structure of the German will give him the ability to pronounce *Ich*. (The other defect so constantly exhibited by those who speak a foreign language even quite well, the imperfect rendering of the peculiar rhythm of sentences as a whole, is one of those that it is in the speaker's power to correct, provided he once turn his attention to the task.)

To meet the want thus defined, we would suggest the establishment of a course of vocal training, in which as many of the various possible sounds shall be taught as circumstances will permit.

An ideal scheme of such a course includes the exercise of the voice in forming all the various sounds possible at each part of the mouth and with each position of the vocal organs, selecting however

only so many of the infinite gradations of vowel sound as is consistent with distinctness, but taking care to include all the known vowel shades of every important tongue.

Such an ideal scheme could not at present be carried out in full, except in very rare cases, for the sufficient reason that teachers are not to be had. And not merely would it be impossible to obtain teachers to carry out the whole scheme, but it would be difficult to find many who could fill some of its most desirable parts. Very few indeed, in America, can pronounce the Arabic gutturals—the "fancals" of Lepsius—yet this would be a very useful attainment to the numerous students of the Hebrew, since the impossibility of properly pronouncing certain letters in this alphabet is one of the chief obstacles with which the student is obliged to contend. He cannot get a distinct impression of a word, if he is compelled to supplement his enunciation of it with a kind of mental picture of its graphic form, and thus the process of "acquiring a vocabulary" is very much more tedious. Furthermore, the more completely the scale of sounds is taught, and the more perfect the acquired power over all the possible combinations of the vocal organs, the more readily could the once acquired dexterity be retained and applied to any particular and especially any novel case. We may forget individual acquisitions, but the ease with which we can revise or extend them depends, in a great degree, upon our general culture.

So far, however, as the sounds of the French and German are concerned, and in the cities, the plan may be carried out with ease, although it would often be necessary to secure different instructors in the sounds of each of these tongues. Each teacher, also could make the sounds of a very large district, as in the system adopted in teaching drawing and music, for the drill required would consume no great amount of time.

When it is possible, instruction is to begin with the youngest children. They should be taught to use the muscles concerned in the production of speech shortly after they have learned to use the arms and legs. If schools in "object teaching" have been established, a part of the time could be given to this exercise. The teacher is to select some short word containing the sound to be taught, letting the children repeat it in turn. The drill would be found far from tedious, and the fuller the scale of utterances tried, the more delight would the exercise afford, since many of them would gratify the

child's natural taste for mimicry. We refer to such sounds as "the hiss of wild fowl," and other noises heard only in the mouths of brutes.

For older children, there might be drawn up a short reading book containing a transliterated selection of words from various tongues, to be used more or less freely, according to the facilities of each locality. Many or all of the words thus selected might be such well-known proper names as contain the peculiar sounds.

The system is capable of endless variation, depending, as already said, on the locality, and also on the taste or the whims of the instructor.

At whatever age the exercise is commenced, it will be found necessary to repeat the drill at intervals, lest the facility once acquired be forgotten. We must not underestimate the amount of practice given to the sounds of our mother tongue, a practice that is repeated every time we speak. Nevertheless, the more completely the scale of utterances is taught at first, the less likely is the pupil to forget what he has learned.

It is a question how far it would be useful to attempt to teach children the action of the vocal organs, since the various modifications of the larynx, pharynx and palate are not consciously produced. We will the result, as we will the flexion of the arm, but the choice of the muscles by which the movement is to be performed is not consciously made. Besides, the object of the exercise is purely practical, merely the communication of a certain facility. Such a facility would be the best possible preparation for the comprehension of the principles of Comparative Philology, a science that is sooner or later to influence all teaching of the classics, even in the preparatory schools.

It should be said that the whole plan here proposed is recommended as a temporary measure, to provide for the urgent need of the youth now growing up at school, with the hope that thorough linguistic instruction is soon to make the necessity less pressing. But the history of education in all countries show that sudden and violent changes in the school system are attended with much the same consequences as in the State and are apt to be followed by other as violent changes in turn. The more complete instruction in the study of the modern languages, although imperatively necessary, is a very serious step and should be cautiously made. Some such plan as the one here described, capable as it is of being applied without great interference with the present arrangement of studies, seems well

adapted to meet the emergency. The present generation of young children could thus acquire a facility that they may entirely miss, while we are waiting for the ripe season for introducing the fuller course.

HISTORY OF PLAINFIELD ACADEMY. NO. IV.

BY REV. L. BURLEIGH.

Rinaldo Burleigh resigned his place as Principal in 1809.

From 1809 to 1816 the Academy was under the successive supervision of Rev. Dr. Nathan Hewitt, Rev. Samuel Backus, Rev. Samuel Phinney, and Rev. Archibald Burgess. It appears to have been generally in a flourishing condition, and to have had a good number of students, notwithstanding the multiplication of similar institutions in various other places.

These gentlemen, with the exception of Mr. Phinney, pursued teaching only for a limited period, having devoted themselves to the sacred profession.

Mr. Phinney graduated at Brown University in 1812, and after teaching two years at Plainfield, was ordained in 1817 as Priest in the Episcopal Church. Having taught in various literary institutions, in connection with the discharge of the duties of the sacred office, Mr. Phinney, in 1830, established a flourishing school at Newburg, New York, known as the "Orange County Institution," over which he presided for about twenty years, when the infirmities of age compelled him to retire from active duties, and his death took place, April 19th, 1855, at the age of seventy years.

Among the pupils of these gentlemen, who received a Collegiate Education were George Robinson, teacher in New York City, and the Hon. Thomas Backus, Lieut. Gov. of Connecticut.

Early in 1816, the Academy suffered a severe loss in the death of Rev. Joel Benedict, D. D., pastor of the Congregational Church in Plainfield, who died Feb. 16th, 1816. He had been for more than thirty years the devoted patron and friend of the Institution, and his superior scholarship and weight of character happily prepared him to advance the cause of education and every important interest in society. He was born Jan. 8, 1745; graduated at Princeton, 1765; studied theology with Rev. Dr. Bellamy.

He was ordained pastor of Newent Society, Lisbon, Ct., Feb. 21, 1771, and remained there a

little more than eleven years, when he was dismissed for lack of support, May 1, 1782. For two years he was without a regular pastorate, preaching occasionally as he found opportunity. The pulpit at Plainfield had been vacant for a long time, and in Aug. 1784 he was invited to occupy it, and was installed Dec. 23, 1784, the sermon on the occasion being preached by his brother Rev. Abner Benedict, of Middlefield parish. The ministerial rate had been given up, and his support was provided for mainly by voluntary subscriptions and the avails of a small fund, and eked out by labors as an instructor in academical and theological studies; he, at times, rendering important temporary aid by teaching in the Academy. He had a long and prosperous term of ministerial service, greatly esteemed among his own people and widely honored throughout the country. In 1808 he received a Doctorate in Divinity from Union College, and in 1814 the same honor was conferred on him by Dartmouth College.

He was especially eminent as a Hebrew scholar, and highly reputed for piety, general knowledge, and prudence. A monument in the Plainfield Cemetery commemorates his virtues.

Rev. Samuel Nott, D.D., preached a funeral sermon upon his death, which was published, from the text, "A great man has fallen in Israel."

Few men who have published so little, have left behind them in the memories of survivors, so enduring a memorial as Dr. Benedict. Those who wish to know more of him will find an extended sketch in Sprague's Annals, Vol. I, page 682. It may be here mentioned that three of the Principals of the Academy, Messrs. Nott, Allen and Phinney, married daughters of Dr. Benedict.

In the fall of 1816 Mr. R. Burleigh resumed the position of principal of the Academy, and continued to fill the office until the beginning of the year 1823; making his whole term as Principal about twelve years. Of the later pupils of Mr. Burleigh who received collegiate education, were Andrew Backus; Andrew Cutler; William R. Watson, Esq., late Attorney General of R. I.; Rev. Charles Dresser; Asa M. Bolles, Esq.; Rev. George Shepard, D.D., late Professor of Sacred Rhetoric in Bangor Theological Seminary; Elisha L. Fuller, Esq.; Isaac G. Porter, M.D.; Rev. Stephen Johnson, at one time Missionary to Siam; and John Cleveland, Esq.

Other pupils of Mr. Burleigh have been distinguished in professional and public life. Among

them are Hon. Stephen Cambreling, Member of Congress from New York; Delano Pierce, M.D.; Hon. David A. Starkweather, member of Congress from Ohio; Judge Samuel Starkweather, of Cleveland, Ohio; Hon. Daniel P. Tyler, at one time Secretary of State of Conn.; William H. Cogswell, M.D., President of the Medical Society of Conn. and during the late war, Special Medical Military Agent of the State of Conn., charged with the duty of looking after the sick and wounded soldiers in all the general and field Hospitals of the country; Nathaniel B. Bowen, member of Congress from Mass; Wm. Mather, Professor of Mathematics at West Point; Wm. Dyer, Esq., John G. Pierce, M.D., late of Westerly, R. I.; Hon. Nathan Fish, late of Mystic River, Conn.; Hon. Wm. G. Bowen, Daniel Watson, M.D.; Hon. George H. Middleton; Hon. Wm. A. Barstow, late Gov. of Wisconsin.

Mr. Burleigh retired from the office of Principal in Jan., 1823, having, for some time previous, been afflicted with a disease of the eyes, which made it necessary to relinquish teaching, and which finally resulted in total blindness which for eighteen years shut from his view the beauties of the earth and sky and veiled his vision in utter darkness. In this midnight he waited cheerfully till the hour of his change came. He died in 1863, aged 89, passing away the same year as his former teacher, Dr. Adams, and only one year younger, his age being the same at death as that of Dr. Pemberton, who was Principle when the Academy was incorporated. In January, 1723, Mr. John Witter succeeded Mr. Burleigh as Principal of the Academy. Mr. Witter graduated at Yale in 1812. During the three following years he had charge of the Hopkins Grammar School of Hartford. Among his pupils at that time were some who have since been eminent as professional men and scholars. After leaving Hartford he was for two years a tutor in his Alma Mater. In 1817 he became principal of Bacon Academy, Colchester, where he continued two years. He afterwards established a family school in Preston, his native place.

To the Supervision of Plainfield Academy Mr. Witter brought accurate and thorough scholarship, much experience in the education of youth, and the reputation of an able and successful teacher. As a condition of assuming the office of Principal, the Old Academy Building was to give place to a new one, better adapted to the purposes of education. In 1825 this important change was effected, and a handsome stone edifice 57, feet by 31, of two

stories, was erected at a cost of about \$4,000. The same structure would now cost \$10,000. A benevolent lady of Plainfield, Mrs. Lydia Farlan, gave the ground, a pleasant and commodious lot on an elevated and commanding position, from which the eye takes in a wide range of surrounding country, including the beautiful valley of the Quinnebaug river. The funds for the erection of the New Building were raised by subscription, and mainly among the inhabitants of the town. The edifice was soon filled with students from various parts of the country and from some foreign countries, the number in attendance being commonly about 100. From thirty to fifty of these pupils were pursuing the study of the Ancient Languages and the higher branches of Mathematics; many of them were preparing for college, or to enter upon the immediate study of some profession.

WORD STUDY.—NO. I.

BY PROFESSOR H. N. DAY, NEW HAVEN.

SYSTEMATIC word-study branches itself at once in four directions leading severally to the departments of—

1. The outer body of the word, or *word-sound*;
2. The inner content of the word, or *word-idea*;
3. The embodiment of the idea in the sound, or *word-form*; and
4. The combination of words in accordance with their intrinsic nature, or *word-construction*.

It is proposed in several successive papers to explore these departments; but with more special care the second, that of word-idea, passing the others with a more rapid survey, and chiefly for a complete view of the second.

I. *Word-sound*.—The outer body of the word is sound—not sound generally, not mere noise, but vocal sound, and vocal sound in the sense of musical sound, and not merely vocal or musical sound, but articulate sound.

Word-sound is musical. It is characterized by the two leading essentials of a musical sound, rhythm and melody, while yet the other elements, time and quality of sound, are not excluded. The immediate constituent of the word is the syllable; and it is an essential property of the syllable as spoken that the voice in uttering it passes through a determinate interval of pitch as measured on the musical scale. It is this musical characteristic which distinguishes the syllable from the letter. In the very nature of the syllable is thus rooted the principle of melody which becomes accordingly an essential property of all discourse, as well as a determining factor in all word-formation. A syllable that is not in the strict sense melodious, that is not susceptible of deter-

minate musical variation in pitch, is a contradiction and absurdity as truly and in the same way as a soundless word.

Again, the musical element of rhythm enters into the essence of the word. Monosyllables are indeed to be regarded as rhythmical in the fuller sense of relative stress only as organic parts of the sentence, where they at once exhibit their rhythmical nature. But words of more than one syllable in taking the accent put on the full rhythmical form. Not without some plausibility have some theorists made the accent the very seat of proper word-life. Beyond question, tone, as comprehending both musical accent and gradation of pitch is of the very life of a word-sound. And as alike rooted in the ultimate elements of speech, both melody and rhythm become vital properties of all true discourse. A true rhetoric must both recognize and accurately distinguish them. A melodious style is not necessarily rhythmical; and both rhythm and melody are widely distinguishable from harmony of style.

But word-sound, while thus melodious and rhythmical is also articulate. The word, even the syllable, may be jointed—may be separated into parts or members, and may be composed of joints or members, subject of course to the higher principles of melody and rhythm. Such vocal sounds, in other words, as can be musically joined may be united into syllables. And in like manner syllables, as actually formed, may many of them be resolved into members which may be separately uttered.

Now it is to be noticed of this articulation that it is a subject, as already indicated, to the principles of melody in the case of monosyllables and those of melody and rhythm in words of more than one syllable. These higher principles in various ways come in and regulate the uniting of the articulated sounds in speech into syllables and words. The laws which could be at once derived from the essential nature of these principles, would form the rules in a scientific word-system under which all word-formation, whether by inflective derivation, or composition, must proceed.

But the term *articulate* as applied to words and especially to words as essentially melodious, has a special significance which has been too much overlooked in the study of words. The syllable is not a mere concrete of separable sounds. It is an organic product; it is composed of organic parts, of proper members, which are jointed by a true life-force that is one and single. This unity in the organic composition of a syllable that may be articulated is discoverable in the melodious property of the syllable. The syllable as we have seen, cannot exist except on the condition of a musical gradation of pitch. As each syllable has its own pitch movement complete in itself which also is single, the sounds articulated into it must be organically united by a sound, an outflow of voice, which is not itself either of the articulated sounds that are to be joined, but although itself shaped by the

same articulating organs, is so shaped only while they are in movement and not in fixed position as in the case of the articulate elements themselves. An articulate syllable accordingly is not made up exclusively of these articulated elements, but of sounds of a peculiar character ever varying with the elements to be jointed together in the syllable, intervening between them and cementing them together so as to bear the pitch movement continuously on through its determinate musical interval.

It is obvious that this intermediate jointing sound may often be of greater import and force in the determination of the proper vocal character and value of the syllable or word than any or all of the articulate elements so called themselves. In such syllables as *pit*, *cat*, this jointing sound constitutes the great part of the sound as actually uttered or heard. In word-change, it performs a very important function, so that only from a distinct consideration of its nature and work can the phenomena in word-change be understood.

Phonetic spelling, in so far as it ignores the presence of this jointing element in all words and syllables that are not uniliteral, misleads and works serious harm. To teach in any way, directly or indirectly, that the sounds represented by the letters *m*, *a*, *n*, make up the total of the word *man* is to lead into grave error.

YOUNG TEACHERS' DEPARTMENT

THE SCHOOL OF GOOD MANNERS.

BY JOHN D. FERGUSON, STAMFORD.

A little book with the suggestive title which heads this article lies before us. It was prepared for the instruction and guidance of youth, probably a hundred and fifty years or more ago, and its quaint maxims give us an insight into the home life of our ancestors which we may fail to gain from dignified histories. They show us on the one hand the progress which we have made in material comforts, and on the other, may lead us to question whether the independence of "Young America," is, after all, in every respect an improvement over the carefulness and ceremoniousness of old time manners. We do not propose however to enter into any discussion, but simply to let the book speak for itself, with here and there a word of comment, only remarking that the true rules of politeness are of no age or time, and are all based on the Golden Rule of doing unto others as we would be done by.

The title page and first few leaves of our copy of "The School of Good Manners" are wanting, and we can give neither author, publisher, nor date, but

it is evidently of New England origin, and probably published not far from 1720.

Chapter I, treats of "Behavior in the Meeting house," where it is evident that a faithful attendance was expected. "Sit where thou art ordered by thy superiors, parents or masters."

"Lend thy place for the easing of any one that stands near thee."

"Keep not a seat in use too long that is lent thee by another; but being eased thyself, restore it to him that lent it to thee." "Fix thine Eye upon the minister, let it not widely wander, to gaze upon any person or thing."

"Be not hasty to run out of the meeting house when the worship is ended, as if thou wert weary of being there."

Chapter II, brings us home.

"Make a Bow always when you come Home, and be immediately uncovered." Never speak to thy Parents without some Title of Respect, viz.: Sir, Madam, &c., according to their Quality."

"Grumble not, nor be discontented at anything thy Parents appoint, speak, or do."

Next, after due caution as to hands and face and hair—the children come to Table.

"Sit not down till thou art bidden by thy Parents or other Superiors."

"Offer not to carve for thyself, or to take anything, tho' it be that which thou dost greatly desire."

After a number of injunctions not far different from those which a careful mother would give her children now a days, we come to two or three, which shew that the book was written before forks were in common use.—Who can tell, by the way, when these were first introduced into New England?

"Grease not thy Fingers or Napkin *more than necessity requires*."

"Bite not thy Bread but break it; but not with *slowly* Fingers, nor with the same *wherewith thou takest up thy meat*."

"Knew not Bones at the Table, but clean them with thy knife (unless they be very small ones), and hold them not with a whole Hand, *but with two fingers*."

"Stuff not thy Mouth so as to fill two Cheeks; be content with smaller mouthfuls." "Drink not, nor speak with anything in thy mouth."

"As soon as thou shalt be *moderately satisfied*; or whensoever thy parents think meet to bid thee rise up from the Table, tho' others thy Superiors sit still."

When Thanks are to be returned after Eating return to thy Place, and stand reverently till it be done."

"Of Children's Behaviour when in Company."

"Enter not into company of Superiors without Command or Calling, nor without a Bow."

"Sing not or hum in thy mouth, when thou art in Company."

"Stand not Wriggling with thy Body, hither and thither, but steady and upright."

"If thou canst not avoid yawning, shut thy mouth with thy towell or handkerchief over it, turning thy face aside."

Before Carpets.—"Spit not in the Room, but in the corner, and *rub it in with thy Foot*, or rather go out and do it abroad."

"To look upon one in Company and immediately whisper to another is unmannerly."

"Of Discourse."

"Speak neither very loud, nor too low."

"Speak clear, not stammering, stumbling nor drawing."

"Loll not, when thou art speaking to a Superior, or art spoken to by him."

"If thy Superior speak anything wherein thou knowest he is mistaken, correct not, nor contradict him, nor grin at the hearing of it; but pass over the Error without notice or interruption."

"If thy Superior be relating a story, say not I have heard it before, but attend to it as if it were to thee altogether new. If he tell it not right snigger not, nor endeavor to help him out, or add to his Relation."

"Beware thou utter not anything hard to be believed."

"Speaking of any distant person it is rude and unmannerly to point at him."

"Of Children's Behaviour at the School."

"Bow at coming in, pulling off thy Hat, especially if the Master or Usher be in the School."

"At no time Quarrel or Talk in the School, but be quiet, peaceable and silent."

"Much less mayest thou deceive thyself in trifling away thy precious Time in Play."

"If the Master speak to thee, rise up and bow, making thy Answer standing."

"Divulge not to any person whatsoever, elsewhere, anything that has passed in the school, either spoken or done."

"When Abroad."

"Go not Singing, Whistling or *Hollowing* along the Street."

[Note in the following the peculiar use of "Son" for the Eldest.]

"When Three Persons walk together the middle place is most Honorable: and a *Son* may walk at his Father's Right Hand, when his Younger Brother walks at his left."

"If a Superior speaks to thee in the Street, answer him with thy head uncovered, and put not on thy Hat, till he either go from thee, or bid thee once and again be covered; take not leave at the first bidding, but with a bow ('*by no means, Sir,*') modestly refuse it."

"If thou meetest the Scholars of another School, jeer not, nor affront them, but show them love and respect, and let them pass along."

"Scorn not, laugh not at any for their natural infirmities of Body and Mind, nor because of them affix to any a vexing Title of contempt and reproach, but pity such as are so visited, and be thankful that thou art otherwise distinguished and favored."

We have of course given a few only, of the rules laid down under each head, but even in these we venture to think that suggestions for the improvement of the manners of the nineteenth century children may be found.

This part of the book closes with an "Admonition to Children," summing up what they have been taught; and then proceeds to religious instruction, with a "short, plain and Scriptural Catechism."

The Peroration of the admonition is rather ambitious in its style, but will make a fitting conclusion.

"By carefully observing these methods of life your Superiors will indeed esteem you; your Inferiors honor and admire you; your Equals delight in and love you; all that know and observe you shall love and respect you; your example shall be propounded as a Pattern of Ingenuity and obliging Behaviour. You shall be valuable and well esteemed in every Time, Station and Circumstance of your lives. You shall be blest with the names of good children, good scholars, good servants, good masters, good subjects. Praise shall be your attendant all your Life long, and your names shall outlive the envy of the Grave, the Encomium of every Survivor shall embalm your Memory."

The young teacher should ever bear in mind that loving sympathy is more potent in winning his pupils to the discharge of all duty, than harsh severity is in driving them.

"PITH AND PURPOSE," OR MISDIRECTED ENERGY IN THE SCHOOL ROOM.

Dr. John Brown, in his father's memoir, as given in "Spare Hours" relates this suggestive incident. At one time, while crossing in a boat from Dunoon to Water Neb, in company with his son and a Mrs. Dr. Hall, the father with characteristic ardor took an oar to help the old boatman, and wishing to do something decided, missed the water, and went back head over heels, to the immense enjoyment of Mrs. Hall, who said, "Less pith, and main to the purpose, my man." This was Mr. Brown's first and last attempt at rowing.

Now we suspect that nearly every School House in the land has been the scene of misdirected efforts, quite as real, and quite as ludicrous too, as this in the skiff at Dunoon. But School Houses keep their own secrets. They tell no tales; and perhaps it is well, on the whole, that they are so close-mouthed. It is well also, no doubt, that all the crude experiments and annoying mistakes, the unexpected defects and humbling falls that are made and endured by school teachers, do not come under the eye and find exposure by the tongue of a critic so sarcastic and witty as watched the pull and tumble of our inexperienced oarsman. Were it otherwise, many who become skilled disciplinarians and efficient instructors, would not have the courage to arise from their falls, renew their efforts, gain the mastery of themselves, and so in the end, turn their mistakes into practical wisdom, and their apparent defeats into lasting victories.

Still Mrs. Hall's counsel is good. It is worth remembering. Men of all professions and occupations may profit by heeding it. In the family, in the church, in the state, at the counter, at the bar and in the pulpit as well as in the school room, more would be accomplished if the purpose were better formed and the strength better guarded. We commend the thought to our teachers, especially those who are inexperienced in their work, who, perchance, are just laying hand to the unused oar by which they are to urge forward and direct the richly freighted boat, whose control they have assumed. Suffer a word of personal appeal and friendly counsel. You may in your zeal and eagerness to gain results, undertake too much; you may hurry too fast; you may work too hard; you may talk when you should be silent; you may be in energetic action when you should sit still. Recalling the figure of the boat and the oar, remember what you have to do—a voyage is before you—

remember your responsibility—immortal souls are committed to your care, remember that months and years of trial await you, that rising and frowning waves may try, and adverse tides delay you. Be sure that you make no random strokes, be sure that you strike the waves aright, be sure that you take advantage of the currents that oppose. First of all get the mastery of yourself. This acquirement is the *first*, and *second* and *third* qualification in the successful teacher. And so we say, *gain it*;—GAIN IT;—GAIN IT.

MISCELLANY.

THE JAPANESE INDEMNITY.

BY SECRETARY B. G. NORTHPROP.

The numerous inquiries made as to the nature of the Japanese indemnity, since I advocated its repayment before the Congressional Committees on Foreign Affairs, indicate a general desire for information on this subject.

In 1863, one of the minor daimios, without authority from the Central Government, erected batteries in the Straits of Simonoseki to keep out traders and all foreign vessels. An engagement occurred between the American steamer "Wyoming" and the Japanese batteries and vessels on July 10th, 1863, off the town of Simonoseki "with considerable damage to the smoke stack and rigging of the 'Wyoming.'" The cost of repairs was estimated by the Navy Department at \$5,000, and the ammunition expended at \$5,169. Total, \$10,169. In September, 1864, there was a combined expedition against these Japanese by the English, French, Dutch, and Americans. As no United States man-of-war was then at Yokohama, our minister chartered the steamer "Ta Kiang," with one Parrott gun, at the rate of \$9,100 per month. During the four days' hostilities she fired eighteen shells, valued at \$260. So the total expense to our Government was \$19,929.

Under the Convention of October 22d, 1864, the Japanese Government assented to the demand of these four Powers to pay an indemnity of \$3,000,000. It was to be paid in installments of \$500,000 each, and shared equally by these powers. Three installments, or \$1,500,000, have been paid.

The House of Representatives last winter unanimously passed a bill "to release the Government of Japan from the payment of the balance of the Indemnity Fund remaining unpaid, amounting to \$375,000, under the Convention of October 22, 1864." This bill is now in the Senate, having just been approved by the

Senate Committee on Foreign Affairs. The unanimity of this action is a hopeful sign.

The Japanese Indemnity Fund now in custody of the Secretary of State is invested in United States bonds, and according to the statement of Hon. Hamilton Fish on the 12th day of March, 1872, amounted to \$780,354.98. Adding interest to the present time the amount will exceed \$800,000. In accordance with a similar petition from the Presidents and Professors of our colleges and other distinguished gentlemen, presented to Congress during the last session, a bill seems likely to pass in favor of repaying the Chinese fund directly to the Chinese Government, or for educational purposes in China. But both funds are entitled to the same consideration. The Chinese payment having been made eight years earlier than the Japanese has been more fully before the public. In both cases this surplus is essentially an overpayment. The Chinese Indemnity Fund is now nearly half a million of dollars. (The exact sum Jan. 17, 1870, was \$421,000.) To use this money for our sole advantage would be derogatory to the honor and dignity of our country. Such was the sentiment of Presidents Buchanan and Lincoln, of Secretaries Cass and Seward, and Ministers Burlingame, Ward, and Low, and Dr. S. W. Williams, several times United States *Charge d'Affaires* in China, and who, as Chinese interpreter, participated in the negotiations of this treaty. His Imperial Highness the Prince Kung, when consulted on this subject two years ago, said that self-respect and national pride, would prevent his doing anything that could be construed into a request. He was content to leave it to the American Government to follow its own sense of justice; but the return of this indemnity, and its devotion to the interests of education in China "would be highly honorable to the United States and advantageous to both countries."

Dr. W. A. P. Martin, the distinguished American scholar, who is now President of the Imperial College in Peking, says: "If this money were returned to them, they would regard it as an unparalleled instance of honesty and integrity, and if applied to the support of their national College, it might continue for ages to impress the people of this capital, and the heads of this empire, with the fact that we have a national conscience. While the pecuniary and intellectual benefit would belong to China, the moral gain would be with us. The use of that fund for our own national purposes would belie the frequent confession that it belongs naturally to the Chinese, and prove to us a disgrace instead of a credit. On the other hand, the endowment with it, of two or three chairs in the Imperial College would be a lasting monument to the integrity and friendship of the American people."

The present time is specially opportune for this movement. Japan is sending large numbers of students here for a thorough course of study, that they may carry home the blessings of our science and civilization, and is now

maturing comprehensive educational plans. But the new schemes meet obstacles. Conservatives deprecate foreign influence and recount the many wrongs already suffered from Europe and America. They glorify the past and denounce the ills unknown in the good old days of isolation. It is not strange that they deem the indemnity an extortion as the total amount of pecuniary damage, according to the official statement of Secretary Robeson, March 20th, 1872, was only \$19,929. But in the face of manifold spoliation from abroad and difficulties at home, a new era has been opened for Japan—the noblest in all her long history. The government is liberal and progressive, and is wisely considering plans which will bless and benefit the empire through all coming ages.

Mr. Mori and the Japanese Embassy, and Mr. Oki the Minister of Education in Yedo have expressed the deepest interest in this movement. It would give timely encouragement in the inauguration of the new system of Education in Japan. Both as an act of justice and an expression of national sympathy and good will, its moral influence would be of greater value than the money refunded. Such an appropriation of these funds would remove existing prejudice, increase American intercourse, influence and commerce, and introduce Western science and civilization. Though the Educational Service in Japan proposed to me is indefinitely postponed, my interest in the progress of that most remarkable and progressive people, especially in their present embarrassments is unabated. The time for inaugurating their new and grand educational system has not yet come. A plan so comprehensive must involve difficulties, and require long preparation. The return of the embassy, and the completion and circulation of their report on the schools of Europe and America, are among the many necessary preliminaries.

Professor Julius H. Seelye, of Amherst College, in his late visit at Yedo, had an interview with Mr. Oki, the Minister of Education, and laid before him the plan of returning the Japanese indemnity fund, to be used for the purpose of female education in Japan. Describing this interview, Prof. Seelye says in a letter dated Yokohama, Sept. 5th, "Mr. Oki was extremely pleased with the proposal, and assured me that it would, if accomplished, be most welcome here. The Japanese are doing much in the education of young men, and are feeling the need of, but are not yet taking many steps towards, female education. If Congress would appropriate the indemnity fund to this purpose it would be eminently just and wise. It would be just, because the amount originally paid was disproportionately large to the offence, and it would be wise not only as inaugurating a work among this people, which I can see plainly needs such an impulse just now, but as serving powerfully for the increase of American influence in Japan."

The late Hon. Wm. H. Seward, under whose administration the stipulation for the Japanese indemnity fund

was made, after visiting that country, and especially during the last year, became much interested in the project of devoting this fund to the education of the daughters of Japan. I am assured by his intimate friends in Auburn, that were he now living, "he would warmly second this plan."

My opinion is that this money should be returned to the Japanese Government without conditions, especially as they are now making extraordinary expenditures for general education, and Mr. Mori has given a written assurance, sustained by the Embassy, that every dollar of it would be devoted to educational purposes. The petition includes another alternative to meet the objection felt in Washington and elsewhere "that having been received under a joint treaty with England, France and Holland, it cannot properly be returned directly to the Japanese Government without the concurrence of these powers."

The fact that over \$800,000 of this money remains unexpended in our hands may suggest unworthy schemes or bogus claims; but devoted to education, it becomes a permanent and profitable investment. In view of the wonderful progress recently made, and the still grander plans now forming, in the face of difficulties and dangers from without, as well as within, no nation ever more needed or merited the sympathy and encouragement of the world than Japan in the present crisis of her affairs. Happy will it be for us and for them if America understands her day of grace. Never in all our history have we had the opportunity of aiding so easily in the regeneration of a great nation. This plain duty or, rather, this privilege we cannot afford to neglect.

A VALUABLE INSTRUMENT.

PROFESSOR WINLOCK'S TELESCOPE AND WHAT IS DONE WITH IT.

The telescope is nine feet in length, its object glass being eight inches in diameter, and it is constructed throughout of carefully-beaten brass which gives to it the strength and rigidity that so large an instrument necessarily requires. Before going further with its description, however, it might be well to state that at present it is used chiefly in finding the exact positions of the stars in the northern heavens, a work which, it will be remembered, has recently been divided among the principal observatories of Europe and America, and also to state that it is eminently useful in the computation of correct time. At each side of the telescope is a large case, containing a system of prisms and reflectors, and two graduated circles, which are divided into spaces of five degrees. Within each case there are also four microscopes, which bear directly upon the small figures of the graduated circles, and which are supposed to be the finest in the world, although this has not yet been satisfactorily settled.

So valuable are these microscopes, and so delicate the construction of the graduated wheels, it was found necessary to cover them entirely with glass in order to protect them from even the finest particles of dust. However, in this portion of the telescope one meets with the curiosity which he should expect to find somewhere in so wonderful a piece of mechanism. It is the surprising manner in which the system of prisms and reflectors, that are within the glass cases, carry the light from one flame to every point of the telescope where illumination is necessary. The flame is in a box, which is suspended from the ceiling at a distance of some seven or eight feet from the telescope. This box is connected with one of the glass cases by means of a long tube, at the end of which is fixed a small prism. A ray of light leaves the flame and enters this prism; it is then reflected at right angles to its previous course until it strikes a small mirror, when it is again reflected along the axis of the telescope to a second mirror, which directs it to the eye-piece of the telescope, where it finally illumines the small wires used in calculating the position of a star. The same flame, at the same moment, also illumines, by means of three distinct prisms, the graduated circles from which the degrees are read with the microscopes. But while these portions of its work are in operation, its rays are being thrown from one reflection to another until they, too, radiate those parts of the microscopes which require illumination, and finally pour a flood of brilliant light over the recording table, which stands a short distance from the telescope. Although this curious arrangement appears to be complex, it is in reality very simple, and its value consists not so much in its economy of light as in the relief which it gives to the astronomer during his night work from the uncomfortable proximity of a hot gas flame. But another surprise meets us in the ingenious method by which the great weight of the telescope is prevented from falling entirely upon the segmental bearings into which its pivots are closely fitted.

This has been successfully accomplished by means of metallic bars, which, resting against the pivots, pass down perpendicularly, and then run off at right angles under the five marble blocks which flank the telescope, and upon which rest the glass cases. At their termination are boxes filled with stone, which, by the pressure against the bars, exert an upward influence upon the pivots, so that the telescope is upheld, and consequently a weight of only about fifty pounds falls upon its true supports. Were the whole weight of this heavy instrument allowed to rest entirely upon the delicate segmental bearing which support its pivots, they would soon wear out and become useless. By this simple arrangement great friction has been avoided, and a surprising easiness and celerity of action, the want of which have always been the chief defects in a large telescope, have been given to its movements. The best qualities of the

telescope are its marvelous rapidity of movement and its admirable steadiness and rigidity. The ingenuity with which Cambridge Observatory appears to be well supplied, has contrived a finding arc, divided into spaces of five degrees, by which the telescope may be set eleven times in the brief space of one minute, at an equal number of degrees, ranging from extreme north to extreme south. But by the old method, which consists of a small graduated wheel on each side of the telescope near the eye-piece, they are able to set the instrument about twice in a minute. In zone work, where the graduated arc is necessarily much shorter, the telescope can be set even twenty-two times a minute.

This is the invention which has given to this telescope an accuracy and celerity of movement that is probably unsurpassed. The steadiness with which it hangs is equally surprising, its position having changed only three hundredths of a second of time during the last three months, a change which has never been equaled by any instrument thus far constructed. Taking these few facts together, one can easily estimate the superiority and reliability of this telescope. It is impossible to describe here the many fine and admirable mechanisms which it contains. Its interior is a complete network of curiosities, and the intimate relation which every particle of machinery holds to its neighbor would make a curious and interesting study. This, then, is the telescope which is employed in the astronomical work that has been divided among the observatories of Europe and America.

It might be well to give here a brief description of this work, which is attracting so much attention. About a year ago the German Astronomical Society divided the northern heavens into zones of five degrees each, in which all stars up to the ninth magnitude are to be carefully observed twice, and their exact positions found. Portions of this work were given to the observatories in Cambridge and Chicago, that of Cambridge being the zone included between 50° and 55° , and containing about 7,500 stars. At the observatory of Cambridge this work was begun November 10th, 1871, and it will require three years longer before it can be completed, only 700 stars having thus far been observed. The great difficulty is that stars often move in groups, and only a few can be selected at a time for observation; meanwhile the rest of the stars in the group escape, and a year must elapse before they are again accessible to the telescope. Consequently, the contemplations will necessarily occupy several years.

The average work of the telescope is from thirty to thirty-five stars to the hour, although a short time ago as many as fifty-two stars were observed in this time, which is recorded as the most rapid work ever accomplished at the observatory. The shortest time in which the observation of a star can be made is thirty-five seconds. In the meantime, however, between April, 1871, and May, 1872, four thousand observations were taken, and a catalogue of seven hundred stars made. The re-

duction of this catalogue, which consists in finding the errors that have been caused by slight deviations in the position of the telescope, is now rapidly drawing to completion. Great care is employed in these computations, as their results are to be compiled into works of reference to be used as aids in longitudinal calculations. A catalogue of the polar stars has also been recently commenced at the observatory, so arranged that an observation can be made once in ten minutes. The value of this catalogue rests in the facility that it will give in finding instrumental fixedness, for which not only the exact positions of equatorial but, also, of polar stars should be known. The astronomer employs for this work the few spare moments directly before and after those computations which belong to the zone work. These observations on the polar stars are confined, we believe, wholly to Cambridge, and will occupy, probably, two years.—*Boston Globe.*

LIBERALITY OF ENGLAND AND AMERICA TOWARDS INSTITUTIONS OF LEARNING.

The contest between England and America in respect to the intelligence of the mass of the people is a point where we justly pride ourselves on our superiority. But we owe much to the common school system of the Northern States—a system which European nations are adopting, with additions suited to increase its efficiency. We ourselves are superadding to it the organization of local libraries, helping immensely in the spread of general intelligence. But they had long gone before us in the establishment of great magazines of books adapted to the wants of schools. As yet we have but little answering to their great university libraries, or to those vaster aggregations which it has been the pride of Denmark, Saxony, England, and France to collect during the last hundred years. Our library of Congress is scarcely half as large as the least of these. It is a fair answer to make, that the poverty of a new country could not afford the great expenditure. But the vast advances which America is making in wealth as well as power will soon take away that excuse. Meanwhile, the habit of liberality in this direction (yet to be formed by us) is impelling those nations grandly to augment all that they have already provided, as the means of helping forward either the higher or lower classes in the acquisition of knowledge by books or the gratification of taste by the study of works of art. In the year now closing, Parliament has appropriated for the British Museum no less a sum than £480,000, and for the South Kensington "department of science and art" the yet ampler largess of £580,000. The total of these appropriations exceeds five millions of dollars, sinking into utter insignificance all that has ever been expended on the Library of Congress. It is probable, indeed, that these great expenditures are meant to provide for the erection of larger buildings in London, but the additions thus contemplated are to

be made to edifices vast already, and they indicate the increasing wealth of collections which now strike the visitor with astonishment. Their agents have ransacked the mounds of Nineveh and Babylon, the tomb of Mausolus and the temple of Ephesian Diana. There may be men enough to flout the idea of bringing to America the relics of famous antiquity, as there were members of Congress dull enough to jeer John Quincy Adams when he proposed the establishment of an astronomical observatory. But England is now sending expeditions to uncover the ruins of the temple of Diana and the temple of Solomon; and when the desire to possess such relics among us shall awake, we may find the opportunity has passed. We may, indeed, some time, possess a great national library, but it can only be by the exercise of a liberality not exerted thus far. New York is just beginning her Metropolitan Museum of Art; but the purchases already made will only disclose the meanness of the first collections, compared with what our traveled citizens remember in Europe. But such magazines are imperative on municipal governments, in order to compensate those who stay at home the advantage which wealth secures to those who go abroad.—*Washington Chronicle*.

ANECDOTES OF PUBLIC MEN.

BY COL. J. W. FORNEY.

How to distribute large individual wealth is one of the problems of civilization. Stephen Girard seems to have solved it, if his great foundation, "The Girard College," is tested by its marvelous and increasing success. Its massive and harmonious proportions, seen from afar, do not more recall and refresh his memory, than the occasional parades of the orphans through the streets, or their decorum, subordination, and intelligence, within doors. These youth make little noise in the world, but they are felt, far and wide, as so many missionaries. Their gratitude to their benefactor is proved by the fact that there are few failures among them. I know of many excellent men who have found the dead Frenchman a living father, and whose ability, integrity, and energy are the fruit of the seeds he planted. He survives in their ever-renewing gratitude; and if it were necessary, I could name lawyers, architects, physicians, manufacturers, bankers of eminence, who proudly look to Girard College as their *Alma Mater*. The orphan who goes in without a friend emerges with hundreds, and, what is better than all, with a self-respect that makes him richer than if he had been left the irresponsible heir of a fortune he could not count. The crop of boys is systematically replenished. They enter from six to ten, and are bound out between the ages of fourteen and eighteen, to agriculture, navigation, arts, mechanical trades, or manufactures. No stigma attaches to their probation, and the name of Stephen Girard is enshrined among their sweetest memories.

As an illustration of the present position of the Girard College, of which so little is known to the outside world, it is only necessary to say that at the last annual meeting the reported number of pupils was 550! What a sight it would be if Girard himself could reappear upon the scene and study the harvest of his superb benevolence! He died on the 20th of December, 1831, in Water street above Market, Philadelphia, a little more than forty years ago. In this interval Philadelphia has grown into a vast metropolis, the nation into something more than an empire, and the world has been revolutionized by the agencies of science; but no wonder would so impress him as his own college and its matchless influence upon civilization. He would realize that his behests had not been disobeyed, and that his bounties had not been misspent. He at least sets a good example to other men of opulence.

I wish our American manufacturers and capitalists, whose colossal fortunes are no less the outgrowth of the industry of their workmen than of their own opportunities, could see the town of Halifax (England,) seventy miles from Liverpool, and there study one of the most striking manifestations of individual munificence in the world, for the benefit of the laboring classes. Sir Francis Crossley, lately deceased, lived at Halifax. He died leaving an immense sum for the use of his worthy operatives. He had no higher ambition than to promote the comfort of those whose toil had made him opulent. More than a thousand of them had taken advantage of his proffer and become interested in his business, which is that of a manufacturer of magnificent carpets. His establishment is the largest in the world, comprising 18 and a half acres, using two thousand horse power in its steam machinery, giving employment to over four thousand men, women, and children. His patent looms for the weaving of tapestry, velvet, and Brussels carpets, table covers, and hearth rugs; his hand-looms for weaving Scotch carpets; his facilities for preparing and weaving linen, cotton and woolen carpets, and for spinning, dyeing, and printing, are all on the premises. These are not simply curious and wonderful in themselves, but impressive evidences of human ingenuity and skill. I saw the thousands dismissed for, and returning from, their noon-day meal, and can never forget the sight, especially as I turned to the beautiful town itself, a miniature metropolis, with long rows of elegant stores, comfortable dwellings, a lordly town hall, fine hotel, churches, and other public buildings. Everywhere you remarked evidences of the wise generosity of Sir Francis Crossley and his family; everywhere you saw how the enormous profits resulting from their astonishing enterprises are shared with the industrious and the deserving. The beautiful park was the gift of the Crossleys to the people. The massive town hall was built out of their money, and an orphanage for the education of the fatherless children of the more emulous of their workmen. The whole air of the place, with its clean, stone-laid streets,

the broad, level roads in the environs, the well-dressed population, and the lovely valley in which it was set like a picture, comes back to me an instructive and pleasing memory. And when we reflect upon the incomes of many of our American manufacturers and capitalists, especially as we visit the busy centres in which they and their workman live, we cannot repress the prayer that the time may come, and come soon, when the contrast between the luxury of the employer and the poverty of the employed, in this country, may not be as startling as it is to-day. In other words, that while the riches of the one are almost incalculably increased, the comforts of the other should be as carefully considered and cultivated. The example of the great English manufacturer, Crossley, whose name, like that of Girard, the greatest of the benefactors of Philadelphia, will be remembered and revered as long as the town of Halifax stands, ought to be copied largely in the United States.

ILLITERACY IN THE UNITED STATES.

BY JOHN EATON, JR., UNITED STATES COMMISSIONER OF EDUCATION.

For purposes of generalization, we may say that all male citizens are now voters, and may hold office, give testimony in the courts, and sit on juries. According to the census, there are in the several States 1,554,931 totally illiterate male adults. If we follow Mr. Mann's rule of adding one-half of those who report themselves able to read, but not sufficiently to enable them to understand common English, we have 2,073,241 practically illiterate.

THE RELATION OF THE ADULT ILLITERACY IN THE COUNTRY TO CIVIL AFFAIRS OF THE SEVERAL STATES AND OF THE UNITED STATES.

The whole number of male adults in all the States cannot yet be precisely given, but enough is known of the proportion borne by the illiterates to the whole number of voters to be profoundly suggestive to those who believe that the intelligence and virtue of the people constitute the only security for the permanence of our institutions and the prosperity of the nation. It will be recollected that 300,000 is a large majority in any election of president. The determination of the election thus far is practically in the control of less than three hundred thousand votes. But this is less than one-sixth of the voters in the country who are illiterate. How often we are told that brain power or intelligence directs the multitude. A mass of ignorance is always a temptation to the designing and evil. They appeal to the passions and prejudices of the ignorant. The more intelligent and virtuous a people, the more they judge for themselves and the less are they subject to leadership.

Had we the total voting male population, as we shall have when the census is complete, it would enable us to

inquire how large a share of the House of Representatives in Congress would be subject to an election by a non-reading constituency—what share of the State officers would be subject to control.

But the computations of the census already enable us to look at the facts in some of the States, and we will do it by obtaining the per cent. of illiterate voting males to the whole number of voters in these States as the means we will use.

In Alabama this is 50 per cent. Therefore they have the power by voting together to elect more than half the Legislature of the State, and over half the members of Congress, and constitute over one-half of any jury in the State, if in each case of jury or member of Legislature, or member of Congress, the percentage for the entire State be held good.

And the same is true in Mississippi, where 51 per cent. of the voters are illiterate, and in Georgia and Florida. In Kentucky, 28 per cent. are illiterate; in Maryland, 22 and Delaware, 24. In these States the illiterates have one-fifth, and more, of the voting power, jury power and witness power. Should these ignorant voters in these cases determine to elect only persons as ignorant as themselves as legislators, judges, governors of State, or members of Congress, what evils could not be conjectured as possible? Verily we have reason as Americans to be profoundly thankful that we have passed so far these possible evils, while so few of them have become actual; but we should improve the years of their delay or absence to make ourselves as a people, in every section of the country, absolutely secure against them by making intelligence and virtue universal.

THE RELATION OF THE ADULT MALE ILLITERACY IN THE COUNTRY TO THE REPRODUCTION OF WEALTH IN THE SEVERAL STATES.

Before proceeding to these inferences, we need to recall a most extensive inquiry which we made in the United States Bureau of Education into the opinions of the three classes of persons scattered over the country, viz: working people, employers, and observers, in regard to the relation of education to industry. We found them all agreeing that, on the average, the ability to read and write adds one-quarter to the productiveness of the rudest manual labor—that is, if one who cannot read and write would earn one dollar per day at the rudest manual labor, adding the ability to read and write would on the average enable him to do or earn one-fourth more, or \$1.25. If thus the 1,554,931 adult males, regarded by the census as illiterate, should add to their intelligence only sufficient to read and write, they would, according to these opinions, add annually to the production of the country \$116,612,425, or nearly twice as much as is paid out annually for all the public instruction in the United States; or in Alabama, \$8,133,450, or nearly sixteen times what is now paid for education in that State; or in Arkansas, \$2,796,925, or more than four times what is paid out for education; or in Florida,

\$1,543,650, or more than forty times what is now paid for education, and nearly a thirtieth part of the present total wealth of the State; or in Connecticut, \$721,275, or little more than one half the present expenditure for education; or in Delaware, \$542,325, or nearly five times what is now expended for education; or in Massachusetts, \$2,380,650, or about two-thirds of the present expenditure for education; or in New Hampshire, \$254,925, or more than three fourths of what is now expended for education.

Consider that the same opinions with regard to the relation of education to industry, agreed that an advance beyond reading and writing, which gave a man intelligence to do business by himself with facility, or to supervise the business of others, added from 65 to 75 per cent.—say, for convenience, 75 per cent.—and for the country it would add to the product of the illiterate adult males \$311,286,209, or near five times the total amount expended for education in the entire country.

We do not enter upon the consideration of the relation of education to the increase of invention among a people. The more general the intelligence of the people, as a rule, other things being equal, the greater will be the number of inventions, the more improvements will be made in machinery, in the various arts of living, in the means of shelter, in wearing apparel, in food, in the instruments of industry, in the kitchen, in the shop, in the farm, and in the facilities of transportation. These results of the increase of intelligence at the present time are beyond our present means of computation.

The numerous and very valuable private efforts to bring to bear statistics for the quickening of different interests in the country, specially those of education, it is not my purpose here to describe. I can only notice, further, the efforts made in the various schools and offices of committees, directors, superintendents of cities, counties, States, and in the United States Bureau of Education, to work out these problems.

Great and effective as the summary of the experience of the country as presented in the census once in ten years may be, it was felt by our educators not to be sufficient. Their work must be done every year: it must have the certainty and constancy of the generations. As school officers, teachers, and superintendents, they need constantly the suggestions of the wisest experience.

The African exploring expedition which the Khédive of Egypt is about to send out under command of Purdy Bey, one of his American officers, comprises five thousand men. The ostensible object of the expedition is, to go into the country which it is supposed that Livingstone may be exploring, and to coöperate with him in case assistance is desired. If this be declined, the expedition will undertake, on its own account, a search for the sources of the Nile; and, if these be discovered, the Egyptian flag is to be planted there, and the country annexed to the already wide domains of the Eastern monarch.

THE CONN. SCHOOL JOURNAL.

NEW HAVEN, JANUARY, 1873.

EDITORIAL.

To all our readers, a happy New Year! The "compliments of the season," it is fashionable to call such wishes; but we are glad to believe that they are far from being all empty compliments. We have little doubt that at this season of ending and beginning another annual cycle, there is a more or less natural and honest gush of good feeling from man to his fellow.

It is well for us all to take a new and resolute start at this season, in progressive ways of thinking and acting. There is an instinctive feeling that every New Year ought to have something fresh in its history—fresh not merely in the newness of its date, but fresh in quality and influence. There is probably a progress from year to year, even in the apparently changeless routine of nature: the earth seems to repeat its revolutions in utter sameness, yet the probability is that it never has pursued twice the same old beaten track, but is ever speeding on in new and advanced courses.

The best teachers are doubtless those who, however they may appear to the casual observer to wheel around in the very same orbits and routines of instruction, year after year, yet are really ever changing, enriching, re-modelling their courses. Such a constant progression is not in the least inconsistent with absolute stability, as we see plainly illustrated in the movements of star-worlds. Among the appropriate wishes of the New Year, there is perhaps none which we might express for the teachers of our State and Country, whose accomplishment would work more beneficial results than this: that their work this year may not be simply an additional impression struck from plates, stereotyped three years ago; but the result of a re-considering, a re-editing, and a re-organizing of all former methods under the newest light, and in accordance with the most progressive ideas of each day.

OUR JOURNAL commences this year in high promise of a useful career for the next twelve months at least. The contributions of able pens are already promised. Our prospects are good for prompt publication and for full columns of interesting matter. Two things however we are constrained to urge, that our success may be the more

complete. One is that all the teachers of the State shall avail themselves of the feast of good things which we purpose to lay before them: the other is that we should be permitted to hear more frequently and generally from the experiences of those who have had any success whatever in the school-room.

A noticeable feature of modern times in our larger cities, is the recent multiplication of so-called "Exchanges" in very many departments of business. There have long been a few time honored Institutions of this kind such as, corn, gold, and Shippers' Exchanges; but they are now coming to be considered necessary in almost any line of business. Teachers, none the less than others who would be the master-workmen, need their exchange; that is, a place of free, social, professional conference—a place where those who *have*, and those who *need*, may meet on common ground for mutual inter-communication and profit.

Evidently this need was seriously felt, when, two years ago, this suspended JOURNAL was re-established by the State Association. We know that we must have an organ for mutual conference and discussion, but it will never come up to the full measure and dignity of its work, until our teachers either as those needing, or as those imparting, flock to our columns somewhat as brokers to their exchange. Let us especially request those of our fellow-teachers who have some words of suggestion, not to wait till they can clothe them in the elaborate expressions of a finished essay, in which case they will command but a limited number of readers, but to throw them at once into the simplest plainest forms, and send them on. We have already evidence of the favor with which some of our late articles in the Young Teachers' Department have been received, in all their abrupt simplicity. Let this year be marked for the abundant contributions to this department, so that we may have a wider range of observation from which to draw our conclusions.

On account of the unusual interest taken by the last Legislature in the matter of Public Instruction, as shown in the codification of the school laws, and the enactment of the compulsory clause, we are naturally inclined to watch this year more closely than usual, the progress of education among the masses, and to notice whether an impetus has been given to the cause by these vigorous measures. It is hardly time yet to gather any facts relating to these points, though we can say that everything indicates progress and success. The renewed

interest thus taken by our State officials, cannot but result, sooner or later, in good.

It remains a sad fact, however, that many of our communities are deplorably dormant in this vital work of the age. In such localities, a few isolated wide-awake committee men alone bear the burdens, and feel the anxieties of the neglected work. To remedy this evil, our Board of Education have taken a timely step. They have secured the services of Hon. Giles Potter, who will canvass the State and endeavor by faithful persuasion, to arouse the people to a sense of their duty. This is a very important and wise movement, and we expect from it the best results. For this mission, Mr. Potter is the right man. The invaluable work he has already done for schools, proves him to be thoroughly enlisted in the cause: in his legislative capacity, as chairman of the House Committee on Education, he gained a very complete knowledge of the situation. He will be assisted as occasion may require, by others qualified to inform the public on educational themes.

We are happy to be able to announce that we have made arrangements to continue our helpful alliance with the *College Courant*, as during the past year. The *Courant* has been purchased by Professor Henry N. Day, and will hereafter be edited by him, assisted by its junior editor, Mr. C. B. Dudley. The well known ability and energy of Prof. Day assures the growth and success of the *Courant*. Mr. C. C. Chatfield will conduct the publication of the *College Courant* and also of the SCHOOL JOURNAL, as Agent. We shall be enabled as heretofore to enrich our columns with appropriate articles from the *Courant*, entirely additional to the full amount of original matter which this Journal has always contained. This arrangement made purely in the interests of our patrons, we hope may not fail to call forth their cordial approval. Our "Miscellany" will be made up almost entirely from the *Courant*. In culling for this department, we shall select that which, in our judgment, will prove most interesting and profitable to our fellow teachers. We are willing that the very instructive articles reprinted in this January number should be accepted by our readers as an earnest of what our "Miscellany" will be, in point of value, for the entire year. Secretary Northrop's article on the Japanese Indemnity Fund, for instance, will richly repay the reading of it, as it gives a full explanation of an interesting matter, and one on which many of us have, of late, sadly felt the need of light.

WE have it in mind, if fairly seconded in our endeavor, to do more in this volume of the JOURNAL, to advance the interests of School Visitors and District Committees, than we have been able to do in the past. There certainly are many topics, of great practical moment, on which these officers would like to know one another's views, and we earnestly invite them to use the columns of this, their own organ of communication, for mutual conference. We say their own organ, because, as is well known, our legislature has, long ago, made generous provision to supply, FREE OF COST, the *Acting School Visitor* of each of the one hundred and sixty-six towns in the State with the SCHOOL JOURNAL, each year through.

Our February issue will contain a very timely article on the Consolidation of School Districts, and we hope that school officers will follow this up with communications on such subjects as are of special interest to their brotherhood.

If any ACTING SCHOOL VISITOR fails on any month in this year, to receive the copy of the JOURNAL to which he is entitled, we here request that he will immediately inform the *Managing Editors* at New Britain of the fact.

We desire sacredly to use the appropriation of the State for the purpose for which it was made, and shall be thankful for all the aid we can get in carrying out this desire.

ANNALS OF EDUCATION.

ROCKVILLE.

The Rockville graded school, Mr. Randall Spaulding, principal, though like many others in the larger towns of our State, is in some respects peculiar in its organization. It includes the Primary, Intermediate and High School courses, so that the pupils who remain to the end and graduate are fitted to enter any of our higher institutions, including Yale College.

Two years and a half ago, when it was put into the hands of the present principal, it was not thoroughly graded. Several departments belonging to the school were accommodated in rooms at some distance from the school grounds. A new building was in process of erection which at the close of the fall term was ready to be occupied. The building is of brick and quite substantial, built with more regard to service than elegance.

At the end of the fall term it was thoroughly reorganized and graded. The Primary departments were assigned to the first floor of the old building; the Intermediate to the new building; while the upper part of the old building was repaired and refurnished for the High-School room. Courses of study were laid out

for each department. The High School course requires four years from the time of admission. It is the design to take pupils in all the common High-School branches, including German, as far as any High-School in the State.

The people of the place seem to be in earnest in their endeavors to have a first class school. In towns of from four to five thousand inhabitants, this seems to be the only practical method of securing a High-School. Such towns do not generally feel able to erect a building solely for a High-School and to maintain such school with all its appointments independently of the schools of lower grade. The next best way is, as is done in Rockville, to concentrate the lower grades as much as possible and to continue the highest grade as a High-School.

The whole school numbers at present about four-hundred and seventy-five, the High-School about sixty. The experiment during the last two or three years has been quite successful and there are now well organized classes in all departments. We understand that two young men from this school will enter Yale next summer.

This town, like many others in the State, would doubtless be greatly benefited by the adoption of the Union District system. It is hoped by some that this will be done the present year, though there is a great deal of inertia to be overcome and many conflicting interests to be reconciled.

There has been marked progress during the present year in the examination of teachers. It has been made much stricter than formerly and with good results.

We will mention also that it is commonly believed that the law of compulsory attendance at school is not well enforced. This, we presume, is still the case in many of our large towns.

WEST HARTFORD.

This town is trying the experiment of a public High School. The school went into operation Dec. 2, 1872, and now numbers thirty-eight scholars. If it proves successful it is proposed to make it permanent. The course of study is mainly preparatory to the Hartford High School, which most of the advanced scholars in town attend.

WINSTED.

The graded school in the East Village, Mr. John F. Peck's, is opening the new term most prosperously. In the upper department there are sixty-four pupils, though, when they entered, there were but sixty-two seats for them. Miss Ellie E. Fox, a graduate of the Normal School in the class of 1870, is the assistant in this department. Miss Coe, the new teacher in the primary department, seems very enthusiastic. She succeeds Miss Hall, who had filled the position much to

the acceptance of the "little folks," for nearly three years.

The two vacancies in the West Village school have been filled by Miss Burr, a graduate of Oberlin, who has been teaching in Fisk University, and Miss Royce, from Vermont. A new set of philosophical apparatus has been purchased for the school.

ENFIELD.

"Scitico" in this town, has passed a vote to enlarge its school-house to double its present size, by putting on an addition which shall make it capable of accommodating 200 pupils.

MASSACHUSETTS TEACHERS' ASSOCIATION.

The annual meeting of the Massachusetts Teachers' Association, recently held at Worcester, was well attended in spite of the storm and severe weather. On Friday afternoon a lecture was given by Prof. A. B. Miller, (Yale, '55) of Maplewood Institute, upon the subject "The proper Length of the School Day." The lecturer gave statistics showing the length of the school day in different parts of the country; also compared the requirement of attendance in city and country, from which appeared the anomaly, that where the provisions for the health and comfort of the pupils were best, the time of required attendance was least. He argued most earnestly for a diminution of the school day wherever and whenever through insufficient ventilation, the pupils were compelled to breathe impure air. He spoke at considerable length in showing how great an injury must accrue if the supply of air was inadequate.

The second branch of his argument was based upon the question of the power of endurance in mental exertion. This he thought was often overestimated especially in the case of younger pupils. His conclusion appeared to be that, taking our schools as we find them, instead of as we wish them to be, four hours attendance a day for the younger scholars, and five hours for the older, would be enough.

In the evening an eloquent and interesting lecture was given by President Chadbourne, of Williams College. He did not announce any subject, but began by speaking of the value of common sense and its importance among the qualifications of the teacher. He thought that to teach in the best manner, a teacher ought to have something to do beside his teaching. By the very necessities of the case, he was almost constantly employed with those younger than he, more immature than he, those under his own authority, and he stood greatly in need of something that would bring him out of his professional life a part of the time, and put him in contact with the world. If he could carry on a farm, build a mill, or take charge of a mine, and still have some time for his school, his wits being sharpened by the friction

of his more active life, he would teach a better school.

The speaker favored a smaller amount of schooling and a larger amount of manual labor for girls and boys. He thought the teacher, like the preacher of the Gospel, was not at liberty to adjust the quality of his work to the quantity of pay he received. He might refuse to engage himself in the work if the pay was thought to be insufficient; but once pledged to it by engaging in it, he ought to do it with all his might and in the best possible manner, without any regard to the amount of compensation.

On Saturday morning there was a discussion of the question "What should be included in the study of English Grammar?"—carried on mainly by Messrs. J. G. Scott of Westfield, and M. C. Stebbins of Springfield. This was followed by a paper by Mr. L. C. Warren of West Newton, on "The proper use of Text Books in Schools."—*Berkshire Co. Eagle*.

BOOK NOTICES.

THE CHILD'S PRACTICAL GEOMETRY. A series of Elementary Problems in Drawing Plane Geometrical Figures. By Walter Smith. Published by James R. Osgood & Company, Boston.

Under the auspices of the State Board of Massachusetts, Mr. Walter Smith has evidently inaugurated a new era for the instruction of drawing in our common schools. For his personal influence and the influence of his books, is fast overleaping the boundaries of the State which employs him. His power lies not only in his gifts as a teacher of the most comprehensive stamp, but in his remarkably clear grasp of the situation, as respects the wants of our common schools. Thoroughly practical in his aims, he casts aside all which, however artistic and tasteful, does not tend to make the pupil a more skilful workman in the shop, factory, or field. Mr. Smith's views are taken from a lofty stand-point, as those who have heard or read his address before the National Association at Boston, well know; yet it is not a position which he uses to the enveloping of himself in an infinite halo of the dignity of his subject, but by which he is enabled to gain a clear idea of the requirements in minute detail.

The book now under consideration has been prepared by Mr. Smith, in consequence of his conviction, founded on experience, that though respectable results may be reached in this art without a knowledge of Geometrical Drawing, yet after such a study, his course on Mathematical Drawing is always more rapid, more intelligent, and more sub-

stantial. This little treatise is designed as an elementary text-book containing "problems for the construction of such figures as are of most frequent use to the designer or artisan." In its construction, the simplest methods have been used, in preference to those which though mathematically more correct are too complicated for the purpose. We can only praise this little work both as to its design and the methods in which that design is carried out. Its cost is trifling while its utility is great. Teachers will do well to adopt it in their classes as a valuable preliminary to Mechanical and Architectural Drawing.

KRUSI'S DRAWING BOOKS. Four Numbers. D. Appleton & Co., New York.

Valuable suggestions upon the subject of drawing may be found in this manuel for teachers.

Mr. Krusi has arranged his plan in such an ingenious and interesting manner as both to secure the attention, and to call the inventive powers of the young mind into activity.

Two ends, freedom and accuracy of movement are constantly kept in view. The topics, comprehensive and systemetically arranged, embrace the definitions of the simple geometric names, a course in designing, object drawing and copying, and are introduced in such a way as to secure the ends mentioned.

The author has left unconsidered the subject of black board drawing, which will give even to young pupils a greater freedom of movement than drawing upon any small surface.

The interesting manner in which inventive and object drawing are introduced to children insure our appropriation of the manuel.

The book is small and not expensive. It well deserves a place upon the teacher's table.

THE CHANDLER ELEMENTS OF DRAWING, introductory to Drawing, Art, and Taste. By John S. Woodman, Dartmouth College, Chandler Scientific Department. Ginn Brothers, Boston.

We welcome this contribution to modern art, now published, from the pen of the late lamented Prof. Woodman. We understand that with the exception of a part of the illustrations, it was entirely completed by himself, and is the system which was employed by him with such eminent success in the Chandler School at Hanover, N. H. It claims to be a most complete and thorough manual for the teacher or pupil in drawing, leading slowly and gradually from the most simple lines, to the principles of shading and perspective. The results sought are to give to all that training of the hand, of

the eye, and of the mind, necessary and sufficient for all ordinary practical purposes, and for sound and correct higher culture by the books and methods already in use. The book is of moderate cost, and the methods such as to be within the reach of all.

PERIODICALS.

A review of the contents of our leading popular magazines for the past year, convinces us that our teachers cannot afford to be without them. While they contain much matter of the light "feuilleton" style to suit the thin tastes of a certain class of readers not largely represented, we hope, among our state teachers, they more than compensate for this trimming to their market, by the generous supply of solid, able, comprehensive and progressive articles which they give us. There is a marked increase, this year, in the number of sound papers directly upon educational questions, and also of items of general scientific information. A file of any one of these magazines, well bound, would be a very desirable addition to any teacher's library. We cannot refrain from more particular mention of some of the prominent magazines.

The *Atlantic Monthly*, among all our periodicals, should be especially prized by teachers as furnishing in all the freshness of its monthly installments, models of purity, elegance, and power, in the use of our noble language. Whatever is not unimpeachable on the score of good taste and accuracy of style, is quite sure to knock in vain at the gates of this well guarded magazine. But this dominating excellence of style is not gained, as in some cases, at the sacrifice of substance. Both for entertainment and for instruction, we may always resort to the pages of the *Monthly*. Out of the many good things of the past year, it seems almost invidious to select any; but we may say that as an interesting study of literary style, the diversions of the Echo Club are well worth reading. Mr. James Parton has improved upon his former successful labors, in the admirable scenes on Jefferson in the various remarkable relations which he sustained in his eminent career. These papers will be continued during the present year. As for Oliver Wendell Holmes' Poet at the breakfast table, who can afford to miss reading it? This series of papers is a perfect arebula of brilliant thoughts, figures, and sketches of character and of life.

Shakespeare says "a man may smile, and smile again and be a villain." But in reading these wonderful scintillations of Holmes' wit, a man will smile, and smile, from beginning to end, and come off a richer and better man for it.

Harper's Magazine has also given its readers a fine assortment of very valuable articles. One of marked excellence in the educational line, is English in School. Others of special interest to all who instruct, and who should be also learners themselves, are the eminent Castelar's papers on the Republican movement in Europe, Old Books in New York, and the noble series of historical and descriptive articles such as the Scott Centenary at Edinburgh, (illustrated), Holland and the Hollanders, the explorations of Di Cesuola in Cyprus, the Roman Capital, and the City of the Saints, (papers full of instructive information in regard to Rome), Northern Bolivia and the Amazon Outlet, California by Charles Nordhoff, History of the Jesuit Mission of Onondaga and many others. The excellent illustrations accompanying much of the text, add greatly to the vividness of the descriptions.

Scribner's Monthly.—No one would think, to look at last year's numbers of this choice periodical, that it is a young magazine; for it has all the ripe mellowness of a veteran. We always hail its appearance, knowing that though having "great expectations" we shall not be disappointed when we dip into its pages. Three grand articles for the Teacher are those entitled, "Our Educational Outlook." "Should the study of the Modern precede that of the Ancient Languages," and "What is Your Culture to Me?"

In the wonders of the West, (Yellowstone Valley), by F. M. Hayden, and the rich articles describing Paris and Venice accompanied by fine illustrations, and others of light quality, we find much to commend to our readers.

The Galaxy makes itself very pleasing in a very unassuming way. Some of the strongest writers in the country are contributors to its columns. Modern Languages in the American College is a thorough discussion of an important question of modern education. Justin McCarthy contributes a most racy series on various celebrities such as Sir Charles Dilke and the English Republicans, the Reverend Charles Kingsley. But for thoroughly enjoyable articles we would commend the remarkably spicy series by Albert Rhodes, keenly descriptive of various national characteristics. The Arabs at Home, the French at Home, and the English at Home, are among these papers. The

Scientific Miscellany of the *Galaxy* is an able compendium of such scientific novelties as are of general interest.

SCRIBNER'S MONTHLY for January is a superb number, opulent with good things. "Arthur Bonnicastle," begun in the November issue, is developing magnificently. We heard an admirer of Dr. Holland say, a day or two since, that he should consider it a sin not to read this story.

HARPER'S NEW MONTHLY MAGAZINE, as lavish in illustrations, and as rich and helpful in letter-press, as ever, is promptly out for January. A few hours' reading, each month, of this well-filled periodical is a most wholesome mental tonic for any hard-worked teacher.

BRYANT'S CELESTIAL INDICATOR.

This is one of the good wines that "needs no bush." It is indeed a very modest looking affair; it has no long arms, bearing planets at their extremities, and sweeping nearly across the room to show how the thing is done; but it is in a very compact form, occupying scarcely more than a cubic foot of space; and so light that one can lift it at arm's length almost as easily as a hat; it is also to be had for a very small compact little price; and every school that is worthy of the name, can possess one. This instrument illustrates most neatly and comprehensively all the chief phenomena of the celestial systems. Its especial forte is a most satisfactory illustration of some of the more obscure problems as the procession of the equinoxes, mutation, &c.; but it is surprising how many points of astronomical philosophy can be evolved from this ingenious apparatus.

With the Indicator and a Celestial Globe, the teacher of Astronomy in our public schools can readily be "master of the situation." This instrument is already largely used in our best schools, and has been repeatedly mentioned to us with praise by some of our most experienced teachers.

PERSONAL.

Hon. Giles Potter is doing good service to the cause of Education, under appointment of our Board as Special Agent to canvass the State. The work in which he is engaged, is in general similar to that of the Agent of last year, Hon. Henry M. Cleve-

land; it is now managed, however, on a somewhat modified plan, and under more extensive powers. Last year, the agent had simply to secure, as far as possible, the cordial co-operation of the manufacturers in the enforcement of the law, in regard to the schooling of operatives. This year, this very important mission includes also the interesting of the same parties, and of school visitors, and citizens generally, in the enforcement of the truant law and the law of general attendance.

Heretofore, the method adopted has been, to visit simply the manufacturers in each locality, and to confer with them in regard to the factory law. An important modification of this plan is now introduced. Mr. Potter puts himself first in communication with the school visitors of each district, and secures their presence and co-operation in his conferences with the manufacturers. The manifest advantage of this plan is that by making the school visitors a party to the transaction, he secures their interest, and renders it far more likely that in his absence the matter will not be suffered to fall into neglect. Already the good results of this method are becoming evident. Mr. Potter is working with much energy and success. He has already witnessed many cases of the beneficent workings of the present stringent laws, under the very gentle, considerate ways in which they are applied.

There has been no disposition on the part of the authorities to resort to violent measures in any case; but a gentle yet firm reminder now and then has brought delinquents promptly up to the requirements, and has, without further exertions, put within our school houses, children who were previously learning rapidly the vices that idleness can teach.

PUBLISHERS' NOTES.

— The old standard steel pen, Gillotts 303, is known wherever a log school house has outgrown the ancient goose quill. The best advertisement they can have is their own merit, which has not grown less as years have rolled by.

— We send out with this number our bills for 1873. We trust there will be a prompt response. "Many a Muckle makes a Mickle" and it is by these small dribbets of a dollar and a half each, that the machine is kept oiled.

— We promise our readers promptness in bringing out the JOURNAL after the February number. That number we intend to give you the first week in the month.

— Ivison, Blakeman, Taylor & Co., have in preparation a new series of Geographies. The series will comprise but two books.

— The Sheffield Scientific School is open to every young man who wants a scientific education. It is the best school of its kind. If you want any information in regard to it write to Prof. Brush.

— Through a mistake in counting, we find ourselves inconveniently short of December SCHOOL JOURNALS. Should any who may read this, be willing to spare that number, they will confer a great favor by sending the same, immediately to the Publishers of the Connecticut SCHOOL JOURNAL, New Haven, Conn.

SCHOOL JOURNAL CLUBBING RATES.

For many years we have made a practice of furnishing other periodicals with our own at reduced rates. We in this way give to our readers all the advantages of club rates, and when more than two publications are desired, it is often the case that the whole price of one of them may be saved.

We have made arrangements for sending THE CONNECTICUT SCHOOL JOURNAL, \$1.50 a year, with other publications at Club Rates, and can supply them as follows:

Name.	Price alone.	With JOUR.
Littell's Living Age,	\$8 00	\$8 50
Every Saturday,	5 00	5 50
Eclectic Magazine,	5 00	5 50
The Aldine,	5 00	5 50
Galaxy,	4 00	4 50
Atlantic Monthly,	4 00	4 50
Appleton's Journal,	4 00	4 50
Lippincott's Magazine,	4 00	4 50
Harper's Monthly,	4 00	4 50
" Weekly,	4 00	4 50
" Bazar,	4 00	4 50
Old and New,	4 00	4 50
Scribner's Monthly,	4 00	4 50
Hearth and Home,	3 00	3 75
Home Journal,	3 00	3 75
Plymouth Pulpit,	3 00	3 75
Peters' Musical Month'y,	3 00	3 50
The Methodist,	2 50	3 50
The Advance,	3 00	3 75
Our Young Folks,	2 00	3 00
Our Boys and Girls,	2 50	3 25
Weekly Tribune,	2 00	3 00
" Times,	2 00	3 00
" World,	2 00	3 00
Herald of Health,	2 00	3 00
The Little Corporal,	1 50	2 50
Am. Agriculturist,	1 50	2 50
Educational Monthly,	2 00	3 00
The Nursery,	1 50	2 50
The Schoolmate,	1 50	2 50
Wood's Household Magazine,	1 00	2 00

Subscriptions at these rates should be for one year, but may be new or old. As all publications are sent by the publishers, after receiving the first number all complaints of irregularity should be sent to them, as it will be more direct. All orders should be enclosed, with Post-Office Order, in Registered Letters, and directed to
Publishers CONNECTICUT SCHOOL JOURNAL,
New Haven, Conn.

CONTENTS OF NO 1, VOL. III.

	PAGE.
ST. PAUL'S SCHOOL, No. 1. By Miss A. B. Berard, West Point, N. Y.,	9-11
VOCAL GYMNASTICS, WITH REFERENCE TO THE SOUNDS OF FOREIGN LANGUAGES. By Morton W. Easton, Hartford,	12
HISTORY OF PLAINFIELD ACADEMY, No. 4. By Rev. L. Burleigh,	14
WORD STUDY, No. 1. By Professor H. N. Day, New Haven,	16
YOUNG TEACHERS' DEPARTMENT: The School of Good Manners, by John D. Ferguson, Stamford: "Pith and Purpose," or Misdirected Energy in the School-room,	17-19
MISCELLANY:	
The Japanese Indemnity, by Secretary B. G. Northrop: A Valuable Instrument—Prof. Winlock's Telescope and What is Done with it: Liberty of England and America Towards Institutions of Learning: Anecdotes of Public Men, by Col. J. W. Forney: Illiteracy in the United States, by John Eaton, Jr.,	9-14
EDITORIAL,	15-17
ANNALS OF EDUCATION:	
Rockville: W. Hartford; Winsted; Enfield; Mass. Teachers' Association,	17
BOOK NOTICES,	18
PERIODICALS,	19
PERSONAL,	20
PUBLISHERS' NOTES,	21

Newest School Books.

National Series.

Watson's Child's Speller.—Printed in imitation of Writing, or Orthography as we use it. To aid the memory by familiarity with the forms of words, and to teach the smallest learners to read writing. Adjunct to the Independent Readers, National Series. Price 25 cents. For examination, post-paid, 13 cents.

Clark's Beginner's Grammar.—On the Diagram System, as improved and perfected by the Author, with the addition of Illustrated Object Lessons. Part I. is adapted to youngest scholars, and the whole forms a complete Brief Course in one volume. Price 60 cents. Unbound copy for examination, 20 cents post-paid.

Monteith's Comprehensive Geography.—A "series" in one volume, independent of all others, presenting simultaneously Local, Astronomical, Descriptive, Physical and Historical Geography; with Allen's Map-Drawing and Globe-Making. Illustrated by magnificent Relief Maps, or photographic bird's eye views. Price \$1 60. For examination (unbound copy), post-paid, 50 cents.

Steele's Fourteen Weeks in Physiology.—The latest work of this popular author. It presents the subject in its most attractive, most practical and simplest aspect. To the student it will be worth four times its cost in doctor's bills. Price \$1 50. For examination, 75 cents.

Folsom's Logical Book-Keeping.—In which the subject is reduced to an Exact Science, and shorn of most of its difficulties by a system of Diagrams and balancing of values. It appeals to the reasoning powers of the pupil, and casts rote learning to the winds. For examination, 90 cents, post paid.

Jepson's Music Readers teach the subject progressively—the scholar learning to read music by methods similar to those employed in teaching him to read printed language. Teachers without musical attainments can use them with facility. Each 75 cents, post paid.

Northend's Young Declaimer.—New selections in Prose, Poetry and Dialogue for the younger class of pupils. Post-paid, 75 cents.

National School Currency—A new idea. A system of Rewards Representing Money—a Debit and Credit account being kept with each pupil, his capital and gains in school money representing his *Proficiency*. Sample set, 10 cents, post paid. Complete set for school of fifty pupils, \$1 50, post-paid.

DESCRIPTIVE CATALOGUES FREE.

A. S. BARNES & CO.,

111 & 113 WILLIAM ST.,
New York.

32 BROMFIELD ST.,
Boston.

SHEFFIELD SCIENTIFIC SCHOOL —OF— YALE COLLEGE,

This Department of Yale College affords to *Undergraduates and Post-graduate Students* the choice of advanced systematic instruction in Mathematics, Engineering, Mechanics, Physics, Chemistry, Metallurgy, Natural History, Mineralogy, Geology, Physical Geography, etc., with French, German, English, Drawing, etc. Programmes sent on application.
NEW HAVEN, CONN., 1873.

III-1-12

TOWNSEND SAVINGS BANK,

CORNER OF CHAPEL AND ORANGE STREETS.

Deposits made in this Bank commence Interest on the Day of Deposit,—which interest is added to principal and *Compounds in February and August* of each year, all of which is free of all taxes.

Bank open from 9 A. M. to 3 P. M.

JAMES M. TOWNSEND, President.

LEVI IVES, M.D., Vice President.

EDWARD H. TOWNSEND, Sec'y.

[II 51t]

JOSEPH GILLOTT'S

STEEL PENS,

OF THE OLD STANDARD QUALITY.

TRADE MARK: JOSEPH GILLOTT, Or Descriptive Name and Designating Number.
Warranted.

The well-known Original and Popular Numbers,

303, - 404, - 170, - 351,

Having been assumed by other makers, we desire to caution the public in respect to said imitations.

ASK FOR GILLOTT'S.

JOSEPH GILLOTT & SONS, - 91 John Street, New York.

SCHOOL FURNITURE.

Send for

ILLUSTRATED CATALOGUE

TO

E. J. PIPER, Manufacturer,

[II 11t]

Springfield, Mass.

WANTED

Book Agents,

FOR THE

GREAT INDUSTRIES OF THE UNITED STATES,

1300 Pages and 500 Engravings, written by 20 Eminent Authors, including JOHN B. GUGH and HORACE GREELEY. This work is a complete history of all branches of industry, processes of manufactures, etc., in all ages. It is a complete encyclopedia of arts and manufactures, and is the most entertaining and valuable work of information on subjects of general interest ever offered to the public. We want Agents in every town of the United States, and no agent can fail to do well with this book. One agent sold 133 copies in eight days, another sold 368 in two weeks. Our agent in Hartford sold 397 in one week. Specimens sent free on receipt of stamp.

AGENTS WANTED FOR THE

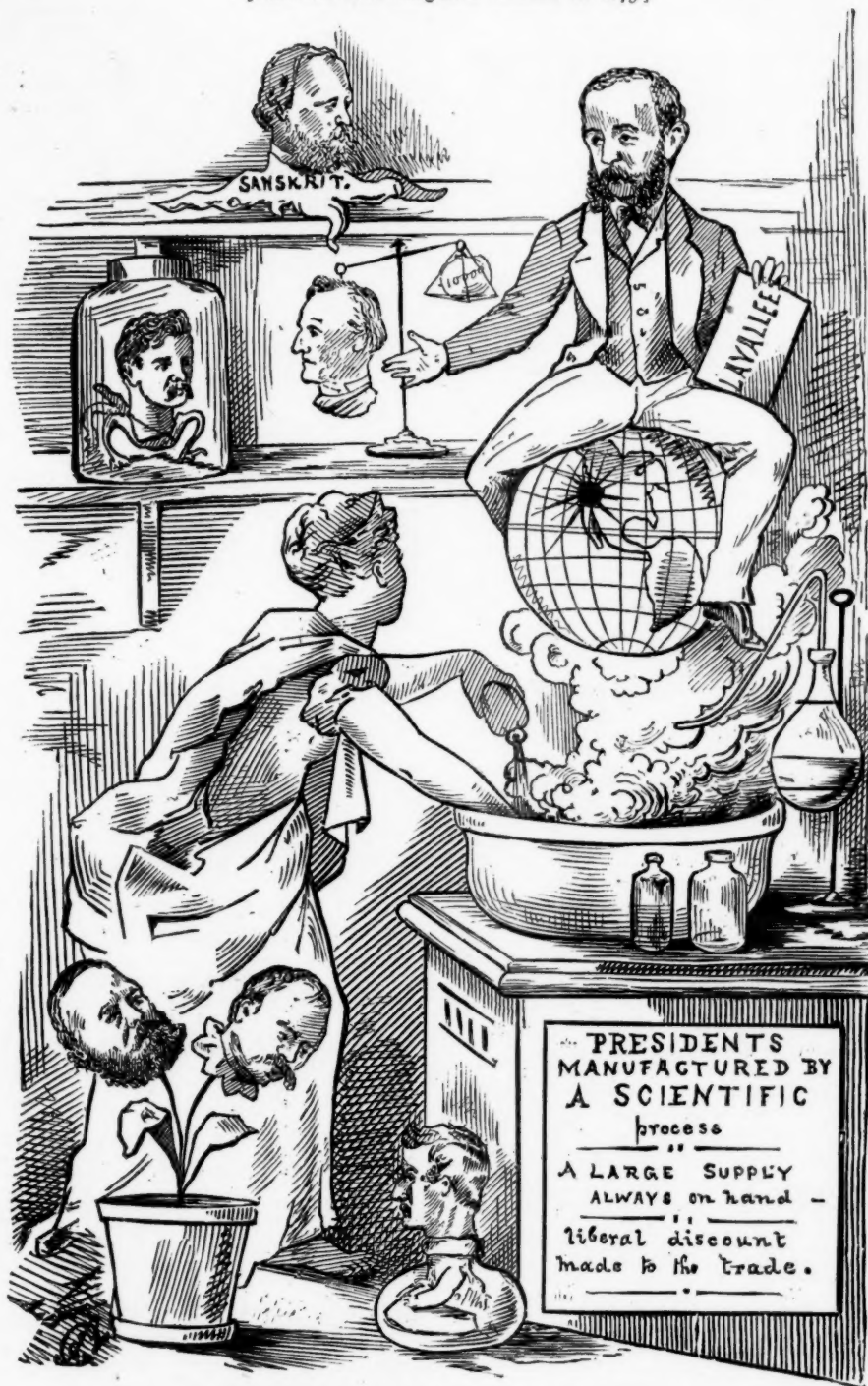
Funny Side of Physic.

500 Pages, 250 engravings. An interesting and amusing treatise on the Medical Humbugs of the past and present. It exposes Quacks, Impostors, Traveling Doctors, Patent Medicine Venders, Noted Female Cheats, Fortune Tellers and Mediums, and gives interesting accounts of Noted Physicians and Narratives of their lives. It reveals startling secrets and instructs all how to avoid the ills which flesh is heir to. We give exclusive territory and liberal commissions. For circulars and terms address the publishers, J. B. BURR & HYDE, Hartford, Conn., or Chicago Ill.

USE
WARD'S INK

SAMUEL WARD & CO.,
Proprietors, Boston, Mass.

[From the Yale Naughtical Almanac for 1873.]



THE SCIENTIFIC SCHOOL'S "NEW DEPARTURE."

The Yale Naughtical Almanac for 1873

Contains an abundance of College Wit and Humor. It is profusely illustrated, and will be greatly enjoyed by every College man. Price **35 cents**. The Naughtical Almanac for 1872 had the largest sale of any student publication ever issued at Yale. Single copies 35 cents. Both sent to one address for 50 cents. Address THE COLLEGE COURANT, NEW HAVEN, CONN.

PROSPECTUS FOR 1873.

LIPPINCOTT'S MAGAZINE.

AN ILLUSTRATED MONTHLY OF

POPULAR LITERATURE, SCIENCE AND ART.

The issue for JANUARY will mark the commencement of the eleventh volume of this periodical, which has already won for itself the highest praise on account of the interest and variety of its matter, the beauty of its illustrations, and the unrivalled neatness of its typography. It is the ambition of its conductors to render it a model of literary and mechanical excellence, and for this purpose they will leave no plan of improvement untried, and will neglect no advantage which either talent or capital can command. They would respectfully solicit attention to the following characteristics of the Magazine, all of which combine to render each issue an agreeable and instructive compendium of

POPULAR READING:

Serial Novels and Short Stories of a highly attractive order by able and brilliant writers.

Articles Descriptive of Life and Manners, graphically written and interspersed with anecdote and lively pictures of society at home and abroad.

Sketches of Travel in various sections of the world, by experienced authors, BEAUTIFULLY AND COPIOUSLY ILLUSTRATED.

Papers on Science and Art, recording in a popular manner the most notable discoveries and most striking productions in these departments of culture.

Literary Criticisms, furnishing impartial and thoughtful reviews of the leading productions of the press in all languages.

Our Monthly Gossip, a department consisting of short and lively articles on persons of note, incidents of the day, and other novel or amusing topics.

Among the most noticeable contributions in the field of fiction will be

A NEW SERIAL ROMANCE,

"MALCOLM,"

By GEORGE MACDONALD, Author of "Robert Falconer," "Annals of a Quiet Neighborhood," &c., the opening chapters of which will appear in an early issue. This production is confidently believed to be the masterpiece of its author, abounding in incident and humor, in striking characters, and dramatic situations.

A large proportion of the articles, especially those descriptive of travel, will be

Profusely and Beautifully Illustrated.

The pictorial embellishments of the Magazine will, in fact, constitute one of the most attractive features; and, in the management of this department, the most liberal and untiring efforts will be made both to satisfy and to elevate the public taste.

For sale by all book and news dealers, Price 35 cents.

TERMS.—Yearly Subscription, \$4; Two Copies, \$7; three Copies, \$10; Four Copies, \$13; Five Copies, \$16; Ten Copies, \$30, with a copy gratis to the person procuring the club. Single Number, 35 cents. LIPPINCOTT'S MAGAZINE with the THE CONTEMPORARY REVIEW, \$10.50; with ST. PAUL'S MAGAZINE, \$6.50; with GOOD WORDS, \$5.75; with GOOD WORDS FOR THE YOUNG, \$5.50; with THE SUNDAY MAGAZINE, \$5.75; with PHILADELPHIA MEDICAL TIMES, \$7.50.

BACK NUMBERS can always be supplied. Specimen Number, with Premium sent and Club Rates mailed, postage paid, to any address on receipt of 10 cents.

To agents a liberal commission will be allowed. Address

J. B. LIPPINCOTT & Co., Publishers,

715 and 717 Market Street, Phila.



The Duke of Argyll, Mathew Arnold, Max Muller, Erckmann-Chatrian, Miss Thackeray, C. Kingsley, Arthur Helps, George Macdonald, Charles Reade, Karl Blind, Miss Mulock, Sir Robert Lytton, Fritz Reuter, Prof. Huxley, Prime-Minister Gladstone, Julia Cavanah, James Anthony Froude, Francis Power Cobbe, Jean Ingelow, Alfred Tennyson, Robert Browning are some of the distinguished authors lately represented in the pages of

LITTELL'S LIVING AGE.

A weekly magazine of sixty-four pages, THE LIVING AGE, gives more than THREE AND A QUARTER THOUSAND

double-column octavo pages of reading-matter yearly, forming four large volumes. It presents in an inexpensive form, considering its great amount of matter, with freshness, owing to its weekly issue, and with a *satisfactory completeness* attempted by no other publication, the best Essays, Reviews, Criticisms, Tales, Poetry, Scientific, Biographical, Historical, and Political information, from the entire body of Foreign Periodical Literature.

TRANSLATIONS.

In addition to the productions of the leading British authors, and in pursuance of its plan of including the best translations, THE LIVING AGE will publish serially, beginning about Jan. 1, one of the finest productions, translated expressly for it, of that charming *Platt-Deutsch* novelist and humorist, FRITZ REUTER, "the most popular German author of the last half-century." His writings, says Bayard Taylor in the *N. Y. Tribune*, "are the wonder and delight of Germany." A charming Christmas-story by the same author will be given about Christmas-time.

The importance of THE LIVING AGE to every American reader as the only thorough as well as fresh compilation of a generally inaccessible but indispensable current literature,—indispensable because it embraces the productions of

THE ABLEST LIVING WRITERS

in all departments of Literature, Science Art, and Politics,—is sufficiently indicated by the following

EXTRACTS FROM NOTICES.

"It is, beyond all question, the best compendium of the best current literature. In no other single publication can there be found so much of sterling literary excellence."—*N. Y. Evening Post*.

"We know of no way in which one can so easily keep well informed in the best English thought of our time as through this journal."—*Christian Union, N. Y.*

"For thinking people, the best of all the eclectic publications, and the cheapest. . . . It is a monthly that comes every week."—*The Advance, Chicago*.

"It gives articles from the great foreign quarterlies which its rivals have not room for. . . . I have no equal in any country."—*Philadelphia Press*.

"The ablest essays, the most entertaining stories, the finest poetry, of the English language, are here gathered together."—*Illinois State Journal*.

"Were I, in view of all of the competitors that are now in the field, to choose, I should certainly choose THE LIVING AGE."—*Rev. Henry Ward Beecher*.

"It still merits the most unqualified praise we can bestow."—*N. Y. Times*.

"The best periodical in America,"—*Rev. Theodore Cuyler*.

"It gives to its readers more than three thousand double-column octavo pages a year, of the most valuable, instructive, and entertaining reading of the day. 'History, biography, fiction, poetry, wit, science, politics, criticism, art,—what is not here?' It is the only compilation that presents with a satisfactory completeness, as well as freshness, the best literature of the almost innumerable and generally inaccessible European quarterlies, monthlies, and weeklies,—a literature embracing the productions of the ablest and most cultured writers living. It is, therefore, indispensable to every one who desires a *thorough compendium* of all that is admirable and noteworthy in the literary world."—*Boston Post*.

Published weekly at \$3 a year free of postage. The next volume begins Jan. 1. New subscribers beginning then will receive Reuter's Christmas story without charge.

Address,

LITTELL & GAY, Boston

THE BEST HOME AND FOREIGN LITERATURE AT CLUB PRICES.

["Possessed of THE LIVING AGE and one or other of our vivacious American monthlies, a subscriber will find himself in command of the whole situation."—*Phila. Bulletin*.]

For ten dollars, THE LIVING AGE and either one of the American four-dollar monthly Magazines (or *Harper's Weekly* or *Bazar*, or *Appleton's Journal*, weekly) will be sent for a year: or, for \$3.50 THE LIVING AGE and *Our Young Folks*. Address as above.



OFFICE IN

KIRBY'S

JEWELRY STORE,

316 Chapel St.,

NEW HAVEN, CONN.

Diplomas, Posters, Coat of Arms, Monograms, &c., designed, and engraved on steel or copper, and printed on Parchment, Parchment Paper, Board, &c. LEADER OF FASHION in Wedding, Invitation and Party Cards, Monograms, &c., &c. 339

SCHOOL FURNITURE,

Office Desks, Settees, &c.

The undersigned having made arrangements with Messrs. J. B. ANDREWS & CO., the celebrated manufacturers of SCHOOL FURNITURE, are prepared to furnish School Desks and Benches of the most approved styles, and of the best materials, at terms as favorable as those made by any other parties.

Having already supplied nearly one hundred School-rooms in this State and Massachusetts, we feel confident that our Furniture will give entire satisfaction to all who may examine it. We most respectfully invite parties wishing to purchase School Furniture to give us a call and examine our samples.

OUR SETTEES

Are just the Things for Halls and Corridors.

We also furnish a superior article of **LIQUID SLATING**, Black, Green and Brown. This can be used on Walls or on Boards, and is warranted to give entire satisfaction wherever it is properly applied. A single testimonial in its favor, from Prof. Dwight, of our State Normal School, will suffice.

STATE NORMAL SCHOOL,

New Britain, Ct., Feb. 1877.

The Liquid Slating furnished by you, gives entire satisfaction. I have never before used so good an article, and I most cordially commend it to any school as an excellent blackboard surface.

WM. B. DWIGHT.

We shall be glad to confer or correspond with those about to furnish School buildings, and our long experience in the School-room, and in Educational work, enables us to make valuable suggestions in the matter of School-room furnishing.

NORTHEND & BARTLETT.

NEW BRITAIN, CONN., January, 1877.

CONNECTICUT STATE NORMAL SCHOOL

NEW BRITAIN, CONN.

This institution is now in successful operation, with a large number of pupils. Thorough instruction is here given, FIRST, in the branches of the study required to be taught in the public schools, and, SECOND, in the best methods of teaching those branches.

Applicants for admission must be at least sixteen years of age, must declare their full intention of teaching in the public schools of Connecticut, and must pass a satisfactory examination in Reading, Spelling, Writing, Arithmetic, Geography and English Grammar.

The full course of study occupies two years. It is so arranged that any graduate of a High School can take the course in one year.

The School year is divided into two terms of twenty weeks each, and a new class is formed only at the beginning of a term.

Examination for admission is held on MONDAY, the first day of each term, at two o'clock, P.M.

The next term opens on Monday, Feb. 26, 1877.

For catalogue, address, at New Britain.

L. N. CARLETON, Principal.

[[11]]

THE HARTFORD COURANT,

(Daily and Weekly.)

THE COURANT is with less than half-a-dozen exceptions, the oldest newspaper printed in the English language. It was founded in October, 1784.

THE DAILY COURANT

Is issued every morning (Sundays excepted) and has the largest advertising patronage, and the largest circulation of any paper in Connecticut. It well supplies the demand for a complete, reliable and popular daily journal.

TERMS \$3 PER ANNUM.

THE CONNECTICUT COURANT

Is a very large Weekly, carefully made up of the most valuable matter appearing in the Daily, and accompanied every other week by an eight-page literary supplement. Its circulation now approaches 15,000 copies extending to all parts of the country, and making it one of the best advertising mediums in New England.

ITS TERMS ARE \$2 A YEAR.

Hawley, Goodrich & Co., Publishers,
No. 14 Pratt Street, Hartford.

Lucrative Employment.

We would call the attention of Teachers and others to the inducements offered by us for engaging in the sale of our Books.

We publish those of the first class only, and such as sell rapidly and easily. We are the publishers of "The Innocents Abroad," "Roughing It," "Beyond the Mississippi," and other kindred books. We have also one of the cheapest Bibles published.

Our arrangements for new Books are complete, and we have two almost ready, which will have large sales. We will make it an object for all desiring to enter the business call to our Books.

We would respectfully ask to be remembered in your negotiations for Books. All particulars sent cheerfully, and calls to our Office invited.

American Publishing Co.,

III-12

125 Ashmun Street, Hartford, Conn.

E. M. THURSTON & Co.,

MANUFACTURERS OF

SUPERIOR SCHOOL FURNITURE,
DESKS AND SETTEES.

7 and 9 FULTON STREET, PROVIDENCE, R. I.



Also makers of the
ELASTIC SLATING,

which is warranted to be superior to either the New York boards, in appearance, color, durability, resistance to light, and, in fact, in all respects, can be claimed for a superior Blackboard.

Best quality of SCHOOL SUPPLIES constantly on hand.

E. M. THURSTON & CO.

7 and 9 Fulton Street, Providence, R. I.

[[12]]

EATON'S MATHEMATICAL SERIES.

JUST PUBLISHED.

AN ELEMENTARY GEOMETRY,

Containing all the essential Propositions and Theorems in less than one hundred pages, with Practical Questions for Review at the close of each book, and Theorems for original demonstration. Designed for High Schools, Academies and Normal Schools. By W. F. BRADBURY, Master in Cambridge High School, and Author of Eaton's Elementary Algebra, &c. Retail price, \$1.00.

AN ELEMENTARY TRIGONOMETRY,

Containing a Practical and Comprehensive Presentation of Plane Trigonometry according to the Geometrical and Analytical Methods, together with the necessary Tables. Designed for High Schools, Academies and Normal Schools. By W. F. BRADBURY. Retail price, \$1.00.

ELEMENTARY GEOMETRY AND TRIGONOMETRY,

In 1 vol. Retail price, \$1.50.

Messrs. T. B. & B. also publish

EATON'S ELEMENTARY ALGEBRA,

For High Schools, Academies and Normal Schools. By W. F. BRADBURY, author of Bradbury's Elementary Geometry and Trigonometry, &c., and Master in Cambridge High School. 12mo, 250 pp. Retail Price, \$1.25.

This work is designed for beginners, and yet is sufficient full for the preparation of Students for College, and for positions as teachers. It contains a large number and a great variety of problems, but does not aim to present all the abstract principles included in works for an advanced collegiate course.

Bradbury's Eaton's Algebra is endorsed by Profs. Bowen and Pierce of Harvard University, Prof. Newton of Yale College, Prof. Quimby of Dartmouth, and other College Professors, as containing enough to prepare students for College, and the book has also received the recommendation of some of the most prominent teachers throughout New England.

It has been adopted and is the only Algebra used in the High Schools of Charlestown, Worcester, Lowell, Cambridge, New Bedford, Fitchburg, Milford, West Roxbury, Holyoke, Plymouth, Abingdon, No. Bridgewater, Webster, Danvers, Melrose, Brighton and Needham, Mass., Saco, Me., Dover, Keene, and Peterboro', N. H., Rutland, Brandon, and Windsor, Vt., Pawtucket, R. I., Stamford, Stonington, Groton, Thompsonville, Thomaston, Wallingford, Conn., and numerous other towns as well as Academies, Private Schools and Seminaries throughout New England and the West.

From Mr. CALED EMERY, *Principal of High School, Charlestown Mass.*

We are using Bradbury's Eaton's Algebra with entire satisfaction. Its accuracy, brevity and thoroughness in the statement and illustration of principles render it, in my opinion, a Model Text Book.

From Mr. L. P. MARTIN, *Principal of High School, Windsor Locks.*

I have tried Eaton's Algebra with excellent success, and can recommend it as much superior to any I have used.

Copies of above works sent for Half-price.

EATON'S SERIES OF ARITHMETICS.

A complete course in Arithmetic for Primary, Grammar, High Schools and Academies. By J. S. EATON, late Instructor in Phillips Academy, Andover, Mass.

This series presents the latest and most improved methods of instruction.

From Prof. I. N. CARLETON, *Principal of Conn. State Normal School, New Britain.*

I believe most fully in Eaton's Arithmetics.

From Hon. JOHN D. PHILBRICK, *Supt. of Public Schools, Boston.*

The use of Eaton's Arithmetics in all the grades of our public schools, during the last four years, has only added new proofs of their excellence. The protracted and severe test to which they have been subjected has fully confirmed the opinion of their merits expressed by me previously.

THE TEACHER'S MANUAL.

This work treats of the discipline of the school and the teacher's qualifications and work. It is especially valuable to young teachers. By HIRAM ORCUTT, *Principal of Tilden Seminary, West Lebanon, N. H.*

Single copies, sent postage paid, on receipt of \$1.00.

Descriptive Catalogue of Eaton's Mathematics and other educational works sent free, on application to the Publishers,

THOMPSON, BIGELOW & BROWN,

[H 1 h]

25 & 29, CORNHILL BOSTON.

WM. H. WHITNEY, New York Agent,
With Mason, Baker & Pratt,
142 & 144 Grand Street, New York.

COMPERTHWAIT & CO.,
Educational Publishers,
PHILADELPHIA.

NEW ILLUSTRATED CATALOGUE SENT FREE.

ALL THE ABOVE ARE EITHER NEW EDITIONS OR ENTIRELY NEW BOOKS.

Hagar's *Arithmetics.*
Monroe's *Readers.*
Warren's *Geographies.*
Greene's *Grammars.*

COMPERTHWAIT & CO.'S EDUCATIONAL SERIES.